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MONTHLY REPORT

OF

THE DEPARTMENT OF AGRICULTURE,

FOR

OCTOBER, 1869.

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GOVERNMENT PRINTING OFFICE.
1869.

MONTHLY REPORT.

DEPARTMENT OF AGRICULTURE, STATISTICAL DIVISION,
Washington, D. C., October 20, 1869.

SIR: I herewith report for publication a statement of the condition of the crops on the 1st instant, with tables of averages, and notes on the respective crops, together with extracts from the correspondence of the Department detailing experiments with seeds, &c.; letters from Idaho and Washington Territories; an announcement of the Cordova Exposition, Argentine Republic; tables of live stock receipts and shipments at Chicago; meteorological tables for the month of September; notes on the weather, &c.

J. R. DODGE,
Statistician.

Hon. HORACE CAPRON,
Commissioner.

CONDITION OF THE CROPS.

The great agricultural lesson of the season inculcates the necessity of draining and thorough culture. It is not an exaggeration to estimate the reduction this season, from the alternate drowning and scorching of farm crops, at two hundred millions of dollars. Reports from drought-parched regions declare the crops "in fair condition on lands well worked," and that the effect of the heat was "aggravated by want of cultivation as dry weather set in;" that on drained soils, properly cultivated, fine crops were obtained, while on wet or undrained lands, and fields neglected or half cultivated, a failure was imminent. The crop returns of Great Britain (where the early season was similar to ours) enforce the same lesson, though a far smaller proportion of British lands are undrained or poorly cultivated.

CORN.

The general apprehension of serious failure in the corn crop of the more northern States has been materially modified by the sunny weather in September, and exemption from killing frosts up to October 1st. Early frosts in some portions of the eastern and middle States checked ripening and left the frosted fields in an immature and damaged condition; but the injury is comparatively slight in extent and limited in area. As a whole, the crop has had an unusually favorable maturing season, resulting in a very gratifying amelioration of the prospect for a supply of this important staple; yet a full crop—which should not be less than 1,150,000 bushels—can by no means be expected. When the harvest is

over, and local estimates are completed, the aggregate will attest a moderate yield, yet an ample sufficiency for all the wants of the country.

West of the Missouri the corn crop is unusually large, the estimated increase in Kansas being 38 per cent.; in Nebraska, 33; Missouri, 7. These, with California, Texas, and Florida, are the only States in which the crop is in average condition. Aside from the difference in area cultivated, which is naturally increasing year by year, the comparison with an average crop is made as follows: Illinois, 87 per cent.; Indiana, 81; Ohio, 86; Michigan, 76; Wisconsin, 75; Minnesota, 90; Iowa, 94; Arkansas, 92; Tennessee, 68; Kentucky, 80; West Virginia, 85. In parts of the South the condition of this crop is worse than in the West; in Virginia, 64; North Carolina, 74; South Carolina, 54; Georgia, 80; Alabama, 90; Mississippi, 88; Louisiana, 90. In the eastern States the figures range from 64 in Maine to 96 in Massachusetts; in New York, 82; New Jersey, 77; Pennsylvania, 86; Delaware, 76.

WHEAT.

Had the spring wheat been equal to the winter, the whole crop would have been enormous. Throughout the South the yield is unusually large, and the quality excellent. Texas and Mississippi are somewhat less conspicuous sharers in this improvement than other States in that section. In Illinois, the counties reporting an increase equivalent to ten per cent. or more are almost without exception in the southern part of the State, below the fortieth parallel—the winter wheat region; those claiming eight-tenths of a crop or less are, with one or two exceptions, spring wheat counties. Indiana grows a larger proportion of winter wheat, and consequently has this year produced a much better average yield than Illinois. Many of the counties return high figures. Among those giving not less than eleven "tenths," are Owen, Johnson, Fayette, Franklin, Bartholomew, Brown, Daviess, Lawrence, Jennings, Ripley, Ohio, Jefferson, Washington, Dubois, Pike, Gibson, Spencer, and Harrison, compactly located in the south; Fountain, Warren, White, Cass, Clinton, Madison, Delaware, Blackford, Adams, and Wabash, in the central belt; and Lake, Porter, Kosciusco, Whitley, Noble, Lagrange, and Steuben, in the north.

Ohio, another winter wheat State, exhibits a remarkable increase in nearly all the wheat-growing counties, conspicuously in a belt of about two tiers of counties near the Ohio River, from Monroe and Washington in the east to Warren and Hamilton in the west, and in the central and northern sections, between Fairfield and Loraine, and Logan and Mahoning, while in the extreme northwest equally favorable results are shown in Ottawa, Lucas, Henry, Wood, and Putnam.

Wheat is quite variable in quality, much of the winter variety being superior, and some of it in the west injured by wet weather or lodging. Spring wheat did not generally mature so perfectly, and much of it in the northwest was injured in the shock or destroyed by floods. Complaints are made in some localities of disappointment in the yield in threshing.

COTTON.

The area of cotton cultivation was increased last spring fully sixteen per cent. More than a million of acres were added to the cultivated area. Fertilizers were liberally used in the Atlantic States, and improved implements were to some extent employed. These facts were

taken as sure indications of a large crop. As the season progressed, serious drawbacks appeared. It cannot be denied that the loss by drought has been severe in the Carolinas and Georgia, greatly reducing the yield on all upland soils of medium depth and quality, causing the blooms and young bolls to fall, stopping the growth of the plant, and forcing into too early maturity the more advanced bolls. In Arkansas and other portions of the southwest the plant was also injured by very hot weather in August. The caterpillar and boll-worm committed depredations in some sections, destroying here and there half the crop of a county; but their ravages were by no means general. Almost universally the later pickings will be greatly reduced in quantity, and the picking season will be over unusually early, except on plantations short of labor.

Detailed and complete estimates of the aggregate yield have not yet been calculated. There is no reason to believe, from an examination of the October reports, that the preliminary and conditional estimate heretofore made, of 2,750,000 bales—the only one made this season, newspaper reports to the contrary notwithstanding—can be exceeded. In the next report will be given a detailed summary of the yield, after final reports are received and carefully examined.

OATS.

Rarely has there been a better season for oats than the present, very few of the States returning a less increase than ten per cent., and some giving thirty or thirty-five per cent. The quality is generally superior. The Excelsior oats sent out by the Department have everywhere succeeded admirably, and have usually maintained their character as the heaviest grown in the United States. The grain distributed weighed fifty-one pounds to the bushel, and in its product the weight is maintained in a remarkable degree. The cool wet weather of the spring and early summer were favorable to this crop.

RYE.

This minor grain crop has scarcely held its own in Illinois, Iowa, Missouri, and some of the southern States, but has yielded abundantly upon an increased area in most of the States, particularly those upon the Atlantic slope.

BARLEY.

An attempt has been made, with a fair show of success, to enlarge the production of this grain, and terminate the scandal of its importation. The increase is estimated at 14 per cent. in Indiana, 11 in Ohio, 9 in Michigan, 10 in Wisconsin, 26 in Minnesota, 7 in Iowa, 20 in Nebraska, 28 in Kansas, 22 in Missouri, 37 in Kentucky, 7 in Pennsylvania, 20 in New York, and 14 in New England. The quality is generally good.

BUCKWHEAT.

This crop is less than an average, except in the New England States and in the northwestern.

POTATOES.

The season has been too dry for either kind of potatoes in the South and on the Atlantic coast to New York. New England generally has a good crop, and it is unusually good in the West, with the exception of Minnesota. The product of sweet potatoes is manifestly decreased.

TOBACCO.

The condition of this crop is not favorable to a large production. About two-thirds of a crop is expected in Maryland and Virginia, and not exceeding nine-tenths in Kentucky and other portions of the West.

SORGHUM.

The condition of sorghum is comparatively low in most of the States. The moisture and coolness of the early part of the season were unfavorable to growth and to the development of the saccharine element in the plant.

FATTENING CATTLE.

A slight increase is reported in the aggregate numbers of fattening cattle, as well as in their average condition. Some of the States fail to maintain a full average, among which are New York, New Jersey, Kentucky, and Illinois.

Table showing the condition of the crops, &c., on the 1st day of October, 1869.

STATES.	WHEAT		OATS.		RYE.		BARLEY.		PEAS.		BEANS.—Average condition October 1.
	Product compared with last year.	Average quality compared with last year.	Product compared with last year.	Average quality compared with last year.	Product compared with last year.	Average quality compared with last year.	Product compared with last year.	Average quality compared with last year.	Acreage compared with last year.	Average condition October 1.	
Maine	13	11.2	13	11.3	11.3	11	12	11.2	10.6	11	10.6
New Hampshire	12.5	10.6	13.5	11.5	11.1	10.1	12	11	10.2	10.2	10.6
Vermont	11.3	10.4	12.5	10.4	11	10.7	11.2	10.8	10.4	10.1	8.8
Massachusetts	11.3	11	12.1	11.2	10.5	10.6	10.5	10.3	10	9.2	9.7
Rhode Island	.....	.....	10.5	10.5	10	10	11	11	10	10	10
Connecticut	10.3	11	13	12	10.6	12	11	11	11	10	9.6
New York	11.5	10.8	12.5	11	9.8	10.1	12	10.4	10.5	10.1	9.6
New Jersey	11.5	10.6	12	11	11.1	11	.....	.....	.....	.....	8.9
Pennsylvania	11.6	10.5	12.5	11	10	10.3	10.7	10.2	9.4	9.8	8.8
Delaware	12	10.8	12	11.5	11	11	12	11	10	10	9.3
Maryland	11.8	11	12	10.8	9.6	9.9	10.5	10.5	9.5	9	8.1
Virginia	12.5	10.9	10.4	10.6	10.8	10.2	10	10	9.5	8	7.3
North Carolina	13	11	10.7	10.3	10.3	10.2	9	10.1	8.9	6.5	6.4
South Carolina	12	10.8	11.2	10.9	10	10.1	.....	.....	8.3	4.8	3.6
Georgia	11.8	10.7	10.6	10.4	10.5	10.2	10.5	10.3	7.7	6	6.6
Florida	.....	.....	10.3	10	9	9.5	.....	.....	9.2	8.5	9
Alabama	11.2	10.7	10	10.2	10.2	9.8	11.2	10	9.1	7.6	9.2
Mississippi	9.8	10.4	11	10.5	10	10	10	10	9.3	9	10.2
Louisiana	.....	.....	.....	.....	.....	.....	.....	.....	10.3	9.8	.....
Texas	9.8	9.5	10.7	10	10.3	10.1	10	10	11.6	10.1	10.6
Arkansas	11.7	11.6	11.5	10.9	.....	.....	.....	.....	9.1	7.9	9.8
Tennessee	11	10.5	10.2	10.3	10.1	10.4	10.3	10.5	9.1	8.8	7.5
West Virginia	11.5	10.7	12	10.3	11.1	10.4	.....	.....	10.2	10	10.2
Kentucky	12	12.1	9.7	9.8	11.4	10.3	13.7	10.1	10	9.8	9.5
Missouri	12	10.5	13	10.4	10.1	9.6	12.2	9.9	9.7	9.7	10
Illinois	10.2	9.5	11	10.6	9.7	9.6	9.8	8.6	9.5	9.6	9.9
Indiana	11.5	10.6	11	10.8	10.7	10	11.4	10.2	9.8	10.2	10.4
Ohio	12	10.5	12	10.5	10.5	10.1	11.1	10.2	10.2	10	10.6
Michigan	10.5	9.2	11.5	11	10.4	10.1	10.9	10.6	10.8	10.5	10.4
Wisconsin	10.6	10.3	12.5	11	10	10	11	10.2	10.6	9.8	10.2
Minnesota	12.5	11.1	12.5	10.2	10.7	10.5	12.6	10.3	10	9.7	10.6
Iowa	10.5	7.7	11	10.1	9.7	9	10.7	9	10	9.4	9.5
Kansas	13.7	11.3	14.9	11.2	12.2	10.5	12.8	10.8	11.8	10.3	10.8
Nebraska	11.6	9.2	12.5	10.1	10.7	10.5	12	8.8	10.2	9.6	9.8
California	10.2	8.5	9.7	9	10.6	9.8	11.7	9.4	9.7	9.8	9.8

Table showing the condition of the crops, &c.—Continued.

STATES.	BUCKWHEAT.—Average condition October 1.	CORN.—Average condition October 1.	POTATOES, (*Solanum tuberosum.*)—Average condition October 1.	POTATOES, (*Batatas edulis,*) sweet.—Average condition October 1.	TOBACCO.—Average condition October 1.	SORGHUM.—Average condition October 1.	SUGAR CANE, (not sorghum.)—Average condition October 1.	COTTON.—Average condition October 1.	OLD WHEAT.—Average amount of old wheat on hand compared with last year.	FATTENING CATTLE.	
										Average number of fattening cattle compared with last year.	Average condition October 1, compared with last year.
Maine	10.1	6.4	10.2	.....	.....	.....	.....	.....	9.8	10	9.6
New Hampshire	11	8.3	10	.....	.....	.....	.....	.....	9.7	11	9.6
Vermont	11.1	7.3	11.1	.....	.....	.....	.....	.....	10.1	10.5	11.4
Massachusetts	8.5	9.2	9.6	.....	10.3	.....	.....	.....	10.5	10.1	10.1
Rhode Island	.....	9	11	.....	.....	.....	.....	.....	.....	10	10
Connecticut	10.3	8.6	11.6	.....	11	9.5	.....	.....	9	9.6	9.6
New York	9.5	8.2	9.5	.....	9.5	.....	.....	.....	10.6	9.8	10.6
New Jersey	7.1	7.7	11.4	9.1	.....	8.7	.....	.....	10.1	9.8	9.5
Pennsylvania	9.1	8.6	10.6	9.8	9.8	9.4	.....	.....	9.7	10	10.3
Delaware	6.6	7.6	7	7.3	.....	6.5	.....	.....	10.6	9.3	10
Maryland	7.4	6.5	8	7.6	6.8	7	.....	.....	10.1	10	9.1
Virginia	5.4	6.4	7.3	7.1	6.3	6.4	.....	8.2	9.5	10	9.1
North Carolina	7.3	7.4	8.4	7	8.7	7.7	.....	7.5	9.2	10.1	10.1
South Carolina	.....	5.4	7.2	5.5	.....	7	8	7.1	9.3	9	8.8
Georgia	.....	8	7.6	5.7	8.5	7.5	7.1	7.8	10.3	10.1	9.2
Florida	.....	12.1	10.5	9 5	10	.....	7.2	7.9	.....	9.4	10.5
Alabama	.....	9	9.2	8	9	8.6	9.2	9	10.2	9.8	8.8
Mississippi	.....	8.8	9.2	8.9	9	8.8	10	9.4	10	10.1	10.1
Louisiana	.....	9	.....	9.5	9	.....	9.7	8.5	.....	11.3	10
Texas	.....	11.6	11	9.9	10	10	10	8.6	6.4	9.8	10.5
Arkansas	.....	9.4	10.2	9.3	10.5	10.7	.....	8.7	11.3	11	9.8
Tennessee	6.6	6.8	7.2	7.2	8.4	7.8	.....	7.2	9.2	10	9.2
West Virginia	8.7	8.5	9.4	9.6	9.6	9.6	.....	.....	10.1	11.1	10.4
Kentucky	9	8	9.5	9.2	9.1	9.5	.....	8.5	9.3	9.5	9.8
Missouri	9.9	10.7	12.3	9.9	10	9.2	.....	8.7	8.9	10.4	10.9
Illinois	9.6	8.7	11.9	9.2	9.5	9.	.....	.....	8.8	9.4	10.4
Indiana	9.4	8.1	11.7	10	9.7	9	.....	.....	9.5	9.9	10.3
Ohio	9.7	8.2	11.5	9.7	9.1	9	.....	.....	8.6	10	10.7
Michigan	10.3	7.6	11.6	10.1	9.5	9	.....	.....	10.2	10.5	10.9
Wisconsin	10.6	7.5	10.6	9	9.7	7.7	.....	.....	8.2	10.2	11.2
Minnesota	10.1	9	9	.....	11.5	8.2	.....	.....	9.2	10.5	10.8
Iowa	10	9.4	11.4	10	8.6	9	.....	.....	9.4	10.6	10.7
Kansas	11.8	13.8	13.8	11.2	10.8	11.6	.....	.....	9	12.4	10.5
Nebraska	10.4	13.3	11.4	7.5	10	10.6	.....	.....	9.1	12	10.4
California	10.6	10.2	10.4	10.3	10	10	.....	.....	10	9.6	10.1

NOTES ON THE CROPS.

CORN.

Androscoggin County, Me.—Corn will not average half a crop.
Oxford County, Me.—Corn about one-half an average crop.
York County, Me.—Corn is ripening well.
Coos County, N. H.—Corn rather light.
Belknap County N. H.—There was a prospect of a total failure of the corn crop, but the warm weather of the month has improved it some.
Merrimac County, N. H.—Corn was not much damaged by the frosts of the latter part of September.
Addison County, Vt.—Corn double the crop expected in August.
Caledonia County, Vt.—Not more than two-thirds of a crop of corn.
Grand Isle County, Vt.—Corn much injured by the cold and wet weather of May and June, and by the ravages of cut-worms.
Orleans County, Vt.—If the weather continues favorable we shall have more than half an average crop of good corn.
Alleghany County, N. Y.—A very fine September; corn has ripened much better than was expected.
Chautauqua County, N. Y.—Corn is about half a crop.
Erie County N. Y.—Corn a fair crop except on low lands.
Monroe County, N. Y.—If the weather continues fine, as at present, corn may be marked ten instead of eight.
Niagara County, N. Y.—A very warm September has had a magic effect on the corn crop; I think we shall harvest about three-fourths of a crop, of very good quality.
Onondaga County, N. Y.—The fall is very favorable for corn, which is now about out of danger from frosts.
Ontario County, N. Y.—The first frost, October 6, injured standing corn.
Suffolk County, N. Y.—The dry weather of August and the early part of September very materially affected the corn crop.
Tompkins County, N. Y.—Corn nearly an average crop.
Westchester County, N. Y.—The corn crop fully as good as it was last year.
Yates County, N. Y.—Corn is ripe and being harvested—a full crop.
Essex County, N. J.—The long-continued drought of August and September has cut short the corn crop.
Gloucester County, N. J.—Corn greatly injured by the drought.
Ocean County, N. J.—The crop has been lessened by the drought nearly fifteen per cent.—a better result than was anticipated. The low, moist lands have increased the average product.
Sussex County, N. J.—The corn crop has been very materially affected by the drought.
Alleghany County, Pa.—We have a corn crop unparalleled in this part of the State.
Beaver County, Pa.—Corn on the hills an average crop; that on flat lands was drowned by the summer rains. In some parts of the county a good crop.
Clearfield County, Pa.—Corn is a failure on account of the drought.
Cumberland County, Pa.—Will average about three-fourths of a crop.
Delaware County, Pa.—Long-continued dry weather has shortened what early in the season was a very promising crop of corn.

Elk County, Pa.—Severe frosts early in September did great damage to corn.

Indiana County, Pa.—The county has never before produced so small a crop of corn; not half a crop compared with last year.

Luzerne County, Pa.—Much soft corn, but more good than was expected.

Montgomery County, Pa.—The corn crop exceeds that of last year by about two-tenths

Perry County, Pa.—The dry weather has lessened the anticipated yield of corn.

Baltimore County, Md.—The crop will fall short, compared with an average, about thirty per cent.

Kent County, Md.—Crop short on account of drought.

Prince George County, Md.—The drought from July 27 to August 28 ruined the corn crop.

St. Mary's County, Md.—Corn is irreparably ruined by the drought on light lands, except where planted early; in all cases cut short to some extent.

Washington County, Md.—Corn crop much better than was expected in this county.

Middlesex County, Va.—There will not be more than a fourth of a crop of corn.

Nelson County, Va.—The protracted and unprecedented drought has told heavily upon the corn crop. The effect of the drought has been aggravated by the badly tilled condition of the crop when the drought set in as early as June 20.

Northumberland County, Va.—The corn crop is much more affected by the drought than was anticipated last month. There will be less than half a crop.

Rockbridge County, Va.—The rains early in September somewhat improved corn. Another correspondent says, the corn crop will be one-tenth to one-fifth of an average.

Smyth County, Va.—In many fields corn is an entire failure; others will yield from five tenths to eight-tenths of the usual crop.

Surry County, Va.—Corn can hardly reach three-fourths of a crop.

Wythe County, Va.—Corn about half a crop; somewhat injured by frosts.

Camden County, N. C.—The corn crop is good.

Chowan County, N. C.—About half a crop of corn.

Jackson County, N. C.—Corn injured by drought.

Franklin County, N. C.—All crops have suffered from the drought, but corn most; there will be about one-half of an average crop.

Mecklenburg County, N. C.—Corn will prove a fair crop on lands well worked.

Pasquotank County, N. C.—Notwithstanding the drought corn will yield two-thirds of the average crop.

Rockingham County, N. C.—We expect about half an average crop of corn.

Wayne County, N. C.—Corn cut off by drought about fifty per cent.

Abbeville County, S. C.—The corn crop will be under one-half an average crop.

Georgetown County, S. C.—Corn less than a half crop.

Union County, S. C.—Upland corn very short, owing to a very dry summer.

York County, S. C.—No corn except on bottom lands, where it is very fair.

Duval County, Fla.—Corn crop very good.

Yalabusha County, Miss.—Corn crop will fall one-fourth to one-third below the average.

Burleson County, Texas.—Corn harvest ended well.

Lavaca County, Texas.—Corn crop badly damaged by the incessant rains.

Craighead County, Ark.—Corn much injured by the drought, which lasted eight weeks.

Phillips County, Ark.—The corn crop will be considerably less than that of 1868, on account of the protracted drought.

Pulaski County, Ark.—Corn is not quite up to the average.

Campbell County, Tenn.—Corn crop never so short in this county.

Carter County, Tenn.—Corn crop not injured by drought except on light soils.

Fayette County, Tenn.—The early corn is a fair average, but the excessive drought has caused almost a total failure in that sown later.

Gibson County, Tenn.—Corn planted late on account of a wet and backward spring; a falling off of about one-tenth in amount planted.

Sevier County, Tenn.—Corn light.

Smith County, Tenn.—Scarcely a half crop of corn in this county; the quality, however, is good.

Berkley County, West Va.—In some parts of the county the corn crop will be reduced about one-fourth on account of drought.

Kanawha County, West Va.—Crop short on account of drought.

Monongalia County, West Va.—Corn crop considerably over an average.

Monroe County, West Va.—Crop cut short by the dry weather.

Scott County, Ky.—Corn crop shorter than in any season in the last seven or eight years.

Atchison County, Mo.—Corn crop above an average.

Trimble County, Mo.—Corn crop rather inferior.

De Kalb County, Mo.—Corn is ripening well, but will not be an average crop; on bottom lands scarcely worth harvesting.

Macon County, Mo.—Corn crop doing well; it will fall short of the average about one-fourth.

Boone County, Ill.—Corn planted early will be of fair quality, but the yield small; that planted later is poorer in quality, and that on wet ground worthless.

Champaign County, Ill.—Fine growing weather for corn, and a fair average crop anticipated.

Clay County, Ill.—Corn an average yield.

Lee County, Ill.—Corn is ripening finely, and the yield will be larger than anticipated.

Hancock County, Ill.—Only about half the usual yield is expected. The condition of some corn is as good as last year, while there is much that does not amount to anything.

Lawrence County, Ill.—Corn very poor, not more than a half a crop.

Sangamon County, Ill.—A full average crop of good, sound corn.

Stephenson County, Ill.—Much of the corn will be far better than we had reason to hope. Three-fourths of it will yield a full crop; perhaps better than last year.

Whiteside County, Ill.—No frost yet sufficient to damage corn; most of it safe; expect about two-thirds of a crop, but sound and of good quality.

Winnebago County, Ill.—The weather of September was very favor-

able for corn. The crop as a whole will be much better than was expected at the beginning of the month.

Kosciusko County, Ind.—The quality of corn will be good; quantity less than one-half an average crop.

La Grange County, Ind.—Not more than about half a crop of corn in the county. On dry soil where it could be properly cultivated, it is good—some fields extra good; but on all low, wet lands it is good for nothing.

Noble County, Ind.—The poorest crop for several years.

Parke County, Ind.—The favorable weather of August greatly improved the prospects for corn.

St. Joseph County, Ind.—Corn cannot make more than one-half a crop.

Steuben County, Ind.—The season has been unfavorable for corn.

Union County, Ind.—Corn greatly injured by grub-worm and drought.

Warren County, Ind.—The severe frost of September 28 damaged the late corn.

Athens County, Ohio.—The crop will be small, having sustained great injury by drought.

Holmes County, Ohio.—Corn injured by frost.

Mercer County, Ohio.—The drought of August and September injured corn in this county.

Cass County, Mich.—Very fine weather for a month past has had a magical effect on corn, maturing the ears very rapidly.

Macomb County, Mich.—The weather of September very favorable for corn.

Van Buren County, Mich.—Corn will not average more than half a crop.

Green County, Wis.—A severe frost on 25th of September injured corn materially. This will be the poorest corn crop for years.

Portage County, Wis.—Corn has very much improved within the last month.

Richland County, Wis.—Corn generally out of the way of frost.

Walworth County, Wis.—The yield will not vary much from six-tenths of last year's crop.

Freeborn County, Minn.—Corn has been considerably injured by the frost of September 27.

Olmsted County, Minn.—Recent favorable weather has improved the prospect for corn; crop as promising as at corresponding time last year.

Cherokee County, Iowa.—Corn better than usual.

Benton County, Iowa.—Corn a full crop.

Johnson County, Iowa.—Crop coming on finely; the late autumn and absence of frost have done the work.

Montgomery County, Iowa.—Corn blades injured by frost.

Leavenworth County, Kansas.—Corn light; not one farmer in ten cultivated crop properly on account of excessive rains in June and July.

Shawnee County, Kansas.—The promise of corn is more than double the yield of last year.

Hall County, Neb.—Corn, although late, will ripen fully, since frost has not as yet damaged it.

COTTON.

Beaufort County, N. C.—Cotton much damaged by severe drought, which still prevails.

Chowan County, N. C.—Cotton injured by the drought and the cold weather early in August, which caused the bolls to drop off.

Edgecomb County, N. C.—The drought has materially injured the crop of cotton.

Franklin County, N. C.—The increased acreage of cotton will make the product nearly or quite as large as last year notwithstanding damage by drought.

Greene County, N. C.—Since September report cotton has not improved as most farmers expected, the rust which had just at that time made its appearance having caused part of the August and nearly all of the September blooms to drop off. Two-thirds of a crop is all that can safely be calculated upon.

Mecklenburg County, N. C.—Cotton was extra fine up to August 1, better than for many years; the long drought, however, has reduced the yield at least one-half.

Pasquotank County, N. C.—Cotton about two-thirds of the average crop, on account of the drought.

Sampson County, N. C.—There is a larger acreage, but very considerably less product per acre.

Stanley County, N. C.—The extraordinary drought in August and September has materially shortened the cotton crop; what there is, however, is remarkable for fairness of tint; the bolls open freely, the foliage remaining green.

Abbeville County, S. C.—Cotton crop about one-half an average.

Newberry County, S. C.—Drought continued up to October 1, which has cut off cotton materially.

Orangeburgh County, S. C.—Cotton injured by rust and the continued drought.

Richland County, S. C.—There will be more cotton raised than last year, but the acreage is larger.

Spartanburg County, S. C.—Cotton did not grow after the 25th of July, losing at least two months' growth. The drought has forced open the bolls unusually early.

Union County, S. C.—Cotton "sorry." I think our county cannot make more than one-half a crop.

York County, S. C.—Cotton very much injured by the drought.

Carroll County, Ga.—Cotton will not average one-half the usual crop.

Chattahoochee County, Ga.—Not more than half a crop of cotton is expected.

Clayton County, Ga.—Two months ago the prospect for a good cotton crop was the best we have had for many years, but owing to the continued dry weather there has been such a falling off, that the crop will prove to be considerably under an average.

Columbia County, Ga.—The drought reported in my last still continues, causing cotton to shed its entire top crop. Not one farmer in ten will make the seed planted.

Crawford County, Ga.—Drought and rust continued until September 26; consequently no cotton was made in August, our principal cotton month.

Glynn County, Ga.—The caterpillar appeared August 15, destroying some fields entirely. The crop will average about seven-tenths.

Liberty County, Ga.—The cotton caterpillar made its appearance August 3. Its ravages have been extensive and destructive, diminishing the prospect of a yield from one-third to one-half.

Macon County, Ga.—The amount of cotton gathered up to this date exceeds that of any previous year, but it was pushed forward by fertilizers, and there remains to be gathered only a small portion of the crop.

Pulaski County, Ga.—On an average cotton is cut off one-half in this county; a larger area than last year planted.

Putnam County, Ga.—On account of increased acreage, the cotton crop will not be three hundred bags short of that of 1868. No late cotton.

Spalding County, Ga.—There will be a greater yield of cotton than was anticipated thirty days ago.

Schley County, Ga.—Cotton damaged by rains, rust, and worms.

Troup County, Ga.—Cotton a failure owing to the drought of July and August. The dry season and the fertilizers used have caused the crop to open prematurely. About half a crop.

Walton County, Ga.—The yield of cotton per acre will not equal that of last year, though, perhaps, the increased acreage may bring the crop up to last year in quantity—deficient in length of staple.

Duval County, Fla.—Cotton injured by the caterpillar.

Jackson County, Fla.—The worm and rust stopped the growth and development of the cotton plant about the middle of September. The fruit then formed has rapidly matured under a genial sun without rain, and it is anticipated that by the middle of October the whole crop of cotton in this county will be ready for market.

Leon County, Fla.—The caterpillar has eaten out about one-fourth of the cotton. The worm has acted strangely this season, coming early and in considerable force on every plantation, but disappearing without doing the damage anticipated. This year has taught us that we know very little of the habits of the worm.

Putnam County, Fla.—The caterpillar has caused a loss of fifty per cent. of the cotton crop, about the same as last year.

Clarke County, Ala.—Fertilized cotton on worn land has made an increase in product of two hundred per cent. I used the soluble Pacific guano, one hundred, two hundred, and four hundred pounds to the acre. The four hundred pounds will make a yield of one thousand five hundred pounds of seed cotton to the acre, the other quantities in proportion.

Dallas County, Ala.—All crops of cotton except the later ones have been somewhat damaged by the caterpillar; those planted subsequent to April 20 have been injured fully twenty per cent.

Greene County, Ala.—Drought has materially injured the cotton crop, causing the late crop to "shed off."

Lee County, Ala.—The early crop will about equal the entire crop of last year. The late crop is worth almost nothing.

Marshall County, Ala.—About one-half a crop.

Perry County, Ala.—Cotton was hastened to maturity by the hot weather of August, and is now nearly all opened; never before matured as early.

Bolivar County, Miss.—Crop injured materially by the August drought.

Lauderdale County, Miss.—Fully one-half of the cotton crop will be surplus, and will not be sold at present as a cash article.

Lawrence County, Miss.—Not half a crop.

Warren County, Miss.—Crop injured by the drought.

Yalabusha County, Miss.—The rust is affecting the cotton so badly that an opinion as to the crop can scarcely at this time be formed. Another correspondent says: "Cotton sixty per cent. better than last year."

East Feliciana Parish, La.—Owning mainly to rust, the cotton crop has fallen off very much lately. The army worm will do some damage.

St. Helena Parish, La.—The top crops of cotton have failed entirely;

consequently the yield as a whole will be light. The entire crop will be gathered by the 1st of December, if the weather continues favorable.

Tensas Parish, La.—The crop promised well in August, but suddenly stopped growing and "shed off" during September. On former estimates it is safe to deduct twenty-five per cent.

Tangipahoa Parish, La.—The cotton crop has suffered considerably from the storms of September, perhaps to the extent of one-third.

Burleson County, Texas.—Cotton will average one-third of a bale to the acre.

Ellis County, Texas.—The drought in July and August injured the cotton crop about one-third.

Fannin County, Texas.—The crop may be set down at five-eighths; loss on account of continued drought.

Henderson County, Texas.—Cotton crop somewhat injured by worms, drought, and rot; it will yield barely two-thirds of the average, but on account of increased acreage will perhaps equal last year's product.

Lavaca County, Texas.—Cotton barely half a crop.

Ashley County, Ark.—The very hot weather in August injured the cotton crop seriously.

Phillips County, Ark.—The cotton crop will be considerably less than that of 1868; the protracted drought of June, July, and August arrested its full development.

Prairie County, Ark.—The little rain we received in September injured cotton, causing it to shed the squares.

Pulaski County, Ark.—Cotton cannot be put higher than eight, in spite of the general indications of a fair yield.

Fayette County, Tenn.—Excessive drought has brought down the cotton crop to about six-tenths of a full crop, the acreage being in excess of last year. Compared with last year, the crop will be about two-thirds.

Gibson County, Tenn.—Owing to wet and backward spring cotton has been damaged by rust.

Henry County, Tenn.—Half the cotton produced in the county will be manufactured at home.

WHEAT.

Androscoggin County, Me.—The usual acreage of wheat not sown; quality of yield good.

Coos County, N. H.—A good yield of wheat.

Caledonia County, Vt.—Wheat crop good.

Orleans County, Vt.—A larger crop than last year.

Chautauqua County, N. Y.—Winter wheat is threshing out well; average yield will be nearly twenty-two and one-half bushels per acre.

Onondaga County, N. Y.—Winter wheat looks well.

Orleans County, N. Y.—Heavy rains in September made it very bad for wheat sowing.

Steuben County, N. Y.—Winter wheat is up and growing well. A large area sown.

Yates County, N. Y.—In consequence of the low price of wheat, a smaller acreage has been sown this fall than usual.

Clearfield County, Pa.—Wheat crop very good.

Luzerne County, Pa.—Wheat good.

Perry County, Pa.—Wheat does not turn out as well in threshing as was expected.

York County, Pa.—The wheat crop is better than at any time within the last ten years.

Baltimore County, Md.—The yield of wheat is heavy; quality very good.

Harford County, Md.—A large breadth of wheat will be sown this month.

Kent County, Md.—Wheat has produced better this year than for several seasons.

Highland County, Va.—A good crop of wheat is expected.

King George County, Va.—The estimate of the wheat crop is fifty per cent. higher than that of last year; quality generally good.

Middlesex County, Va.—The excessive drought has well nigh destroyed all prospect for full crops; no fallowing has been done for wheat.

Smyth County, Va.—A large area of winter wheat is being sowed.

Camden County, N. C.—The drought will curtail the wheat crop.

Edgecombe County, N. C.—Comparatively little wheat grown in this county. The acreage this year is about one-fifth greater than heretofore, and rather higher than that in quality.

Forsyth County, N. C.—The wheat is fine.

Red River County, Texas.—The product of the present year is a good average crop of superior quality.

Greene County, Tenn.—A large average of wheat, but a small yield; all needed at home to help out the deficient supply of corn.

Monongalia County, West Va.—A good yield of wheat; grain plump.

Graves County, Ky.—Over an average yield of wheat.

Russell County, Ky.—Farmers are putting in double the quantity of wheat usually sown.

Trimble County, Ky.—Less wheat being put in than last year, in consequence of present low prices and the large amount raised this year.

Atchison County, Mo.—Wheat not a good crop.

Benton County, Mo.—Large area of wheat sown.

Cass County, Mo.—A much larger breadth of wheat sown than ever before.

Vernon County, Mo.—Not so much wheat raised to the acre as last year, but the quality is better, with twenty-five per cent. more sown.

Boone County, Ill.—Spring wheat is yielding ten and eleven bushels per acre on an average; quality good.

Lee County, Ill.—Wheat is yielding an average of eight bushels to the acre.

Lawrence County, Ill.—Grasshoppers are doing some damage by eating the winter wheat that is up.

Marion County, Ill.—The quantity of wheat falls short of the promise of harvest; quality good.

St. Clair County, Ill.—There will be from two-fifths to three-fifths less wheat sown this fall than for several years; wheat does not pay expenses.

Winnebago County, Ill.—On account of rust and blight, the wheat product will fall short of that of last year.

Adams County, Ind.—A large acreage of wheat is being sown.

Noble County, Ind.—Wheat crop good.

Rush County, Ind.—Wheat averages twenty bushels per acre on bottom lands, and fifteen on uplands.

Washington County, Ind.—Yield of wheat sixty per cent. greater than last year; quality good.

Athens County, Ohio.—Wheat crop much above the average of several years; quality inferior to that of last year; a large proportion shrunken by rust.

Hardin County, Ohio.—Wheat looks well.

Warren County, Ohio.—"In the memory of the oldest inhabitant we have not had so large a crop of wheat."

Douglas County, Wis.—Spring wheat is badly damaged in the shock by wet weather.

Fond du Lac County, Wis.—Wheat not yielding as well as anticipated.

Pierce County, Wis.—Wheat very much injured by continuous wet weather. A larger acreage than last year, but quality much inferior.

Portage County, Wis.—In wheat there is a large growth of straw, but not as much grain in proportion as last year.

Walworth County, Wis.—The yield of wheat exceeds expectation; will average nearly twelve bushels per acre.

Washington County, Wis.—Winter wheat and club badly shrunken; Monmouth and Rio Grande plump and fine.

Carver County, Minn.—Wheat is over the average yield, but on account of the wet season the quality falls below the crop of last year.

Faribault County, Minn.—A larger acreage of wheat than ever before, and a fair yield; one or two tenths of the crop injured in the stacks by heavy rains.

McLeod County, Minn.—Wheat injured in the shock and stacks by heavy rains.

Audubon County, Iowa.—Wheat badly injured in the stack.

Benton County, Iowa.—Wheat half a crop.

Floyd County, Iowa.—A heavy yield of wheat, but about half the crop badly damaged by the rains.

Iowa County, Iowa.—A small yield of wheat, and very much damaged by the wet weather.

Johnson County, Iowa.—The wheat crop is worse shrunken and injured more by the extremely wet season than was supposed before threshing.

Madison County, Iowa.—About twenty-five per cent. of the wheat crop spoiled by the rains, and the remainder more or less damaged.

Montgomery County, Iowa.—Wheat not as much damaged by the rains as was feared.

Muscatine County, Iowa.—Wheat is proving fully as bad as was anticipated before harvest; very much of it is being fed to hogs, being unfit for any other use.

Le Roy County, Kansas.—A large breadth of wheat sown; it is coming up well.

Leavenworth County, Kansas.—Quality of wheat impaired by wet weather.

Riley County, Kansas.—Wheat as far as threshed fully equal to expectations.

Mendocino County, Cal.—A larger acreage of wheat than last year, but quality inferior.

Columbia County, Oregon.—Winter wheat harvested in good order, but spring was left in the shock during the late heavy rains, and about thirty per cent. sprouted.

Douglas County, Nevada.—Wheat largely in excess of last year.

Gallatin County, Montana.—Spring wheat has produced a better quality than ever before.

OATS.

Androscoggin County, Me.—Oats very good.

Coos County, N. H.—A good yield.

Norfolk County, Mass.—Oats secured in good condition.

Niagara County, N. Y.—The crop of oats as large as was ever harvested in the county, and of good quality.

Tompkins County, N. Y.—Oats heavy, and a large crop.

Clearfield County, Pa.—A very good crop of oats.

Elk County, Pa.—Oats are good.

Luzerne County, Pa.—A good crop of oats.

Perry County, Pa.—Oats a full crop; quality good.

Baltimore County, Md.—Oats fifty per cent. better in quality and quantity than last year.

Mecklenburg County, N. C.—The wet spring favored the crop, which gave an increased yield over last year.

Pickens County, Ga.—Crop of oats small—about enough for home consumption.

Boone County, Ill.—Product below an average; yield per acre thirty-five to forty bushels of good quality.

Champaign County, Ill.—A large crop of oats of superior quality.

Winnebago County, Ill.—Crop of oats somewhat affected by rust and blight, yet product and quality much better than last year.

Warren County, Ohio.—A better crop than for many years.

Cass County, Mich.—Quantity and quality of oats never better.

Douglas County, Wis.—Oats sustained some damage on account of continuous wet weather.

Montgomery County, Iowa.—Oats not as much damaged by rains as was feared.

Muscatine County, Iowa.—Oats yielding as well as usual, and coming up to standard weight.

Atchison County, Mo.—Oats better than usual.

Riley County, Kansas.—The crop of oats good.

Leavenworth County, Kansas.—Oats damaged by the wet weather.

Douglas County, Nevada.—The crop of oats largely in excess of that of last year.

POTATOES.

Androscoggin County, Me.—A fair crop of potatoes.

Lincoln County, Me.—A fair average yield of potatoes of superior quality, but have commenced rotting within a few weeks, and some fears are entertained for the crop.

Oxford County, Me.—A light crop of potatoes, but the quality superior.

York County, Me.—Potatoes sound.

Caledonia County, Vt.—A good yield of potatoes, but they are rotting badly. A larger breadth than usual planted.

Chittenden County, Vt.—A good yield.

Orleans County, Vt.—A large crop, but the early varieties are rotting badly; still there is more than an average of sound potatoes.

Norfolk County, Mass.—Potatoes abundant, and as yet not seriously affected by rot.

Chautauqua County, N. Y.—Potatoes are rotting badly.

Erie County, N. Y.—A fair yield, but are rotting to some extent.

Livingston County, N. Y.—Potatoes are rotting badly.

Niagara County, N. Y.—The rot has become general among potatoes; already more than half the crop spoiled. Yield heavy. Harrison and Early Rose freest from rot.

Yates County, N. Y.—Potatoes a third above an average yield, with some rot.

Gloucester County, N. J.—Potatoes greatly injured by drought.
Ocean County, N. J.—Potatoes much injured by the drought.
Allegheny County, Pa.—The potato crop unparalleled in this county.
Beaver County, Pa.—Potatoes are rotting; tops blighted about the 1st of September.
Clearfield County, Pa.—A light crop.
Delaware County, Pa.—Potatoes free from rot. The drought will greatly lessen the yield.
Elk County, Pa.—Potatoes rotting badly.
Luzerne County, Pa.—Potatoes good in yield and quality.
Perry County, Pa.—A full crop.
Prince George's County, Md.—Crop destroyed by drought.
St. Mary's County, Md.—Late potatoes suffered much from drought.
King George's County, Va.—Crop short.
Rockbridge County, Va.—Late potatoes a failure.
Camden County, N. C.—Potato crop nearly ruined by drought.
Mecklenburg County, N. C.—A fair average crop.
East Feliciana County, La.—Potato crop unpromising.
Lavaca County, Texas.—The second crop of potatoes looks tolerably well.
Fayette County, Tenn.—A decreased yield on account of drought.
Sevier County, Tenn.—A light yield.
Kanawha County, West Va.—Late potatoes injured by the drought.
Graves County, Ky.—An average yield—about equal to that of last year.
Boone County, Ill.—Yield extra, both in quantity and quality.
Clay County, Ill.—A fine yield of potatoes.
Champaign County, Ill.—Potatoes selling for fifteen cents per bushel in the field.
Sangamon County, Ill.—A greater breadth than usual planted. Yield remarkably fine.
Winnebago County, Ill.—Potatoes are very fine; but little complaint of the rot.
Steuben County, Ind.—A good crop.
Morrow County, Ohio.—A very large crop.
Cass County, Mich.—Quantity and quality of potatoes never better.
Carlton County, Minn.—The continual rains have rotted potatoes, and not more than half a crop is expected.
Carver County, Minn.—It is feared the potato crop will be a total failure. The wet season caused the rot to be almost universal.
Faribault County, Minn.—Potato crop large, but there is much complaint of rot, caused by the rains.
Sac County, Iowa.—The wet season has caused about one-half the potato crop to rot.
Atchison County, Mo.—The best grown in many years.
Dakota County, Neb.—Potato crop injured by rot. Peach-Blows and some other varieties seem to resist the rot.
Walla-Walla County, Wash. Ter.—Potatoes doing well.
Douglas County, Nevada.—The crop of potatoes will be largely in excess of last year.

HAY AND PASTURAGE.

Caledonia County, Vt.—The hay crop not as heavy as last year.
Onondaga County, N. Y.—Pasturage good.
Suffolk County, N. Y.—Pasturage affected by the drought.

Westchester County, N. Y.—Pasturage affected by the drought.
Gloucester County, N. J.—Pasturage injured by the drought.
Kent County, Md.—Short pasturage.
Prince George's County, Md.—Pasturage destroyed by drought.
Loudon County, Va.—Pasturage very short.
Middlesex County, Va.—Pasturage is drying up.
Nelson County, Va.—The unprecedented drought has told heavily upon the pastures, and consequently upon the condition of beef and stock cattle.
Jackson County, N. C.—Pasturage injured by drought.
Fayette County, Tenn.—Pasturage parched by the drought.
Grundy County, Mo.—Hay crop very good.
Steuben County, Ind.—The unusually wet season has benefited grasses and pasturage.
Morrow County, Ohio.—Pasturage abundant.
Vinton County, Ohio.—Pastures nearly burned up.
Carlton County, Minn.—Wild hay swept away by the floods, and the tame is materially damaged.
Carver County Minn.—Hay in the valleys swept away or badly damaged.
Mille Lac County, Minn.—Large amount of hay carried off by floods.
Meeker County, Minn.—About one-half the hay crop destroyed by the rains.
Winona County, Minn.—Immense quantities of hay lost by the late rise in the Mississippi.
Wright County, Minn.—Nearly all the hay cut in the marshes has been spoiled; streams overflowing their banks have carried away hundreds of tons of hay. The prospect looks dark for wintering stock.
Floyd County, Iowa.—A short crop of hay.
Johnson County, Iowa.—Grass and pasturage good.
Santa Clara County, Cal.—Quality of hay poor.

FRUIT.

Androscoggin County, Me.—Fruit almost a failure.
York County, Me.—Apples about one-third of a crop.
Chittenden County, Vt.—Apples not abundant. Plums a good crop.
Chautauqua County, N. Y.—Grapes look well, but are about three weeks later than usual, and will not all ripen before frost.
Erie County, N. Y.—Grapes will hardly ripen.
Niagara County, N. Y.—A fine crop of peaches. Apples in large quantity, and the fruit fine; nearly or quite as abundant as two years ago, when we sold from this county one hundred and seventy-five thousand barrels.
Onondaga County, N. Y.—Grapes very late.
Ontario County, N. Y.—A good crop of peaches. Grapes coming on well.
Yates County, N. Y.—A small crop of apples.
Alleghany County, Pa.—Grapes are a failure. Peaches and pears very extra, both in quantity and quality.
Lancaster County, Pa.—Plenty of peaches and pears; a medium crop of apples; grapes better than for several years.
Montgomery County, Pa.—Peaches abundant, but sustained injury from drought.
Highland County, Va.—Apples and peaches abundant and of fine quality.

Smyth County, Va.—Apples and peaches abundant, but of inferior quality.

Beaufort County, N. C.—Grapes injured by the drought.

Yalabusha County, Miss.—Muscadine grapes a fair crop; other varieties are failures.

Crawford County, Ark.—The fruit crop, apples, pears, peaches, and quinces, rotted about three-fourths, grapes about one-fourth.

Fayette County, Tenn.—Peach crop a failure; apple crop moderate; pear crop ordinary; Scuppernong grapes, as usual under all vicissitudes, very productive.

Washington County, Tenn.—It is estimated that this county has shipped this season one hundred thousand pounds of dried blackberries.

Rock Island County, Ill.—Concord grapes are fine, and the only variety of any value in this vicinity this season.

Fountain County, Ind.—Apple and pear crops good; some varieties better than last year. Peaches scarce.

Hardin County, Ohio.—Grapes have succeeded better than any other of the fruits.

Vinton County, Ohio.—Fruit crop large and well matured.

Fond du Lac County, Wis.—Apple crop very fine and free from worms.

Johnson County, Iowa.—To some extent apples have been rotting on the trees.

Atchison County, Mo.—Fruits good.

HOGS.

Fayette County, Tenn.—Hogs look well, what few are left. No cholera.

Greene County, Tenn.—It will be impossible for farmers to fatten their hogs unless upon mast, of which it is thought we have a heavy crop.

Union County, Ind.—Fattening hogs scarce. There is a great scarcity of corn.

Atchison County, Mo.—The hog crop is largely in excess of former years—fifteen thousand the present season against eight thousand to ten thousand for former years.

OTHER CROPS.

Androscoggin County, Me.—Barley a good crop.

Chittenden County, Vt.—All grains suffered from rust.

Grand Isle County, Vt.—A good crop of beans.

Norfolk County, Mass.—Beans better than an average. Buckwheat seriously damaged by the great gale.

Suffolk County, N. Y.—The dry weather materially affected the yield of buckwheat, beans, &c.

Yates County, N. Y.—Buckwheat a little damaged, but the increased acreage will bring the crop up to an average.

Ocean County, N. J.—Buckwheat is a failure.

Sussex County, N. J.—Buckwheat materially affected by the drought; all other crops a full average, except rye.

Bradford County, Pa.—Buckwheat injured by the hot sun of September.

Clearfield County, Pa.—Buckwheat unexpectedly light.

Indiana County, Pa.—Buckwheat about half a crop. Peas and beans not good in quality or quantity.

Prince George County, Md.—Tobacco crop seriously injured by the drought, which lasted from July 27 to August 28.

St. Mary's County, Md.—Tobacco seriously damaged.

Henry County, Va.—The tobacco crop greatly improved in September. In the absence of early frosts, about eight-tenths of an average crop may probably be realized, but the quality will be inferior.

Isle of Wight County, Va.—Peanuts have literally roasted in the ground; about one-third of a crop of inferior quality is expected. Sweet potato crop suffered severely from drought.

Middlesex County, Va.—The excessive drought has well nigh destroyed all prospects for the fall crops.

Surry County, Va.—Peanuts almost a failure.

Beaufort County, N. C.—All late crops greatly injured by the severe drought. Sweet potatoes, beans, and peas nearly ruined.

Caswell County, N. C.—Shortly after last report there was rain sufficient for the tobacco crop, by which it was much improved. The season, however, is so far advanced that it cannot mature fully, and an early frost may yet cut the crop short.

Chowan County, N. C.—The pea crop will be very short.

Currituck County, N. C.—Sweet potatoes and peas badly injured, the drougth still continuing.

Edgecombe County, N. C.—Pea crop injured, and sweet potatoes almost ruined.

Franklin County, N. C.—The severest drought in forty years. All crops have suffered.

Gates County, N. C.—But little rain since July first. Beans, peas, sweet potatoes, &c., suffered greatly.

Jackson County, N. C.—Drought has seriously injured sweet potatoes and ruined buckwheat.

Mecklenburg, N. C.—Sweet potatoes cut short by the drought.

Pasquotank County, N. C.—The drought has been more extended and of longer duration, and crops have been more injured by it, than has ever before been known in this section.

Sampson County, N. C.—Peas and sweet potatoes injured one-half. The dryest season ever known here.

Georgetown County, S. C.—The protracted drought has been unfavorable for all provision crops in this State.

Orangeburg County, S. C.—Rice crop cut short by drought.

York County, S. C.—Fall crops injured by the long drought.

Chattahoochee County, Ga.—The pea crop nearly a failure.

Early County, Ga.—Best crops year since 1859.

Liberty County, Ga.—Good seasons for harvesting rice and corn.

Macon County, Ga.—Sweet potato crop almost an entire failure.

Pickens County, Ga.—Tobacco and sorghum will yield good crops. Rye, peas, and beans about enough for home consumption. Hottest summer in ten years.

Schley County, Ga.—Sweet potatoes a small crop.

Jackson County, Fla.—The agricultural operations of the year are for the most part highly satisfactory and remunerative.

Leon County, Fla.—The dry fall has been favorable for the cane crops.

Yalabusha County, Miss.—All crops more or less affected by rust.

Fayette County, Tenn.—Tobacco and sweet potatoes superior to crops of last year.

Lavacca County, Texas.—Sugar cane looks promising.

Henry County, Tenn.—Tobacco nearly all housed in tolerably good order.

Sevier County, Tenn.—Sorghum a light crop.

Monongalia County, West Va.—Buckwheat less than an average crop.

Graves County, Texas.—Rye about an average. Tobacco under an average.

Metcalf County, Ky.—As a general thing crops are not as good as last year on account of long drought.

Russell County, Ky.—Tobacco has improved. Should there be no frosts within the next fifteen days it will be of fine quality, but the crop will be small.

Boone County, Ill.—Rye deficient; barley, product good, but heads discolored; hops a fine yield; flax a little above the average.

Clay County, Ill.—All crops good.

Hancock County, Ill.—The cultivation of sorghum almost entirely abandoned.

Iroquois County, Ill.—Broom-corn has been extensively raised this season.

Winnebago County, Ill.—Rye a light crop, a large proportion of the grain shrunken; barley light; sorghum but little raised; broom-corn crop heavy.

Rush County, Ind.—Sorghum partially frosted.

Athens County, Ohio.—Buckwheat almost a failure.

Hardin County, Ohio.—Nearly all crops have been from one to three weeks behind their usual time in maturing.

Warren County, Ohio.—Tobacco and sorghum have turned out better than was anticipated.

Douglas County, Wis.—It is feared that the grain crops are seriously injured by the heavy rains.

Meeker County, Minn.—About one quarter of the grain crops destroyed in the fields by rain.

Nicollet County, Minn.—Very much of the grain is wet and damaged in the stack.

Riley County, Kansas.—Good crops of rye and barley.

Mendocino County, Cal.—More barley raised than last year, but did not turn out as well.

Benton County, Oregon.—Early rains injured about one-fourth of the grain crop.

Walla-Walla County, Wash. Ter.—An unusually dry summer. Grains will not yield more than half a crop.

Douglas County, Nevada.—Barley crop largely in excess of that last year.

EXTRACTS FROM CORRESPONDENCE.

EXPERIMENTS WITH SEEDS FROM THE DEPARTMENT.

Wendell, Mass.—To make a test for common farm purposes, the seeds received from the Department were given only ordinary manure and attention. Dunnett's First Early peas planted April 27. We had a deep snow May 1, which remained until May 7. The peas germinated May 26, yielded green peas July 2, and ripe seed (second crop of pods) July 27, from the growth of which I am now again picking ripe seed. Thus two crops of green peas have been obtained in one short cold season. This is a very rich and valuable variety for farm and market purposes, moderately productive, but very even quality. McLean's Epicurean peas

were planted May 25, yielded green peas July 9, ripe seed (second crop of pods) July 29. This is a very rich variety, not very productive, but having no rival as a green pea, except the Champion of England. The Long Surry carrot, planted April 27, germinated May 29, and produced September 20, good roots from sixteen to twenty-three inches long, of a fine golden orange color throughout, tender, crisp, and with the flavor of the sweet potato. It is very productive and is superior for table use to any varieties we have. The White-tipped Scarlet Oval radish, planted April 27, germinated May 18, pulled June 16 to July 10. Large, tender, crisp, sweet, and is superior to any variety we have. Carter's Early cabbage was planted in open boxes May 10, transplanted June 7, and cuts now twelve to sixteen pound heads. It is rich, sweet, and hard, a valuable variety, even in size, and with no false heads. No variety is better suited to the cool and humid season of our hill towns, which in fact has a similarity to the English summer. The season has not been favorable to the Dwarf Deep-blood-red beet, notwithstanding it is an English variety. The product has been very small, though very rich, sweet, tender, and crisp. It apparently needs a much higher culture than it would ordinarily receive here. Of the New Pine Apple beet I cannot speak too highly. It has reached to about eight inches in length and from six to eight inches circumference at the head, is of light red color, and though growing very slow by reason of the unfavorable season, has been entirely free from corkiness, is very even in size, and has proved in all respects the best table beet that I know. Both these varieties of beet were planted April 27, and matured about the middle of September. The Bossin lettuce has proved a very superior, though this season a late variety; is very tender and crisp, possessing a strong opiate taste. It is large and hard-headed, and is the only variety which has succeeded with me this season. It was planted May 10, transplanted June 13, and cutting was commenced August 20. Lenormand's Short-stemmed cauliflower was planted May 12, transplanted June 12, and cut October 2, all transplanted having formed heads very even in size. It is very rich and sweet, and is not excelled by any variety known to me. I think it suited to our usual seasons.

Middlesex County, Mass.—The Needham Park onions were nearly all destroyed by the fly, while other varieties in the vicinity were untouched. Those which remain do not make bulbs as large as the common Silver Skin. The Student parsnip is an excellent variety for autumn use, while our common parsnip is fit to eat only in the spring. The Short-horned carrot is early and of fine quality, though not large or long. Madeira Cabbage lettuce grows luxuriantly, and is succulent and tender. The Excelsior oats, (four quarts sown on sixteen square rods,) produced beyond my most sanguine expectations. Many of the stalks were over six feet in height, and the grain heads were large and well filled. This variety of grain must, I think, usurp the place of that now generally sown.

Steuben County, N. Y.—The Polish wheat sent me last autumn was sown on new ground, and harvested late in July, yielding at the rate of twenty-four bushels to the acre. The Arnautka wheat was sown the first week in May, and harvested August 23. Heads very compact and well filled. Yielded at the rate of twenty-one bushels to the acre. The White Swedish oats yielded at the rate of fifty-six bushels per acre, forty-five pounds to the bushel.

Chautauqua County, N. Y.—The Polish wheat grew very rank, but fell down, and was struck by rust, so that it amounted to nothing. The Rough Chaff did not come up at all. My land is very rich.

Alleghan County, N. Y.—This season I raised eight bushels on the second crop from the quart of Tappahannock wheat received from the Department in the fall of 1867. It is equal to the original seed, is pure and clean, has a short stiff straw, will stand rich ground, and is ten to twelve days earlier than any other wheat that I have known in the county. The Wethersfield onion has done well. The True Yellow Danvers, Large Tripoli, White Lisbon, and Large Madeira onions came up well, but were nearly all *scallions*, and therefore worthless. The Superfine Early cabbage did not prove as good as the Early York. The Narraganset Sweet corn was good, though small, as all other kinds are this year, owing to much rain and cool weather.

Suffolk County, N. Y.—The product of the Polish wheat was about equal to that of the Bearded Red wheat, but neither equaled the yield of the Bald Mediterranean, received some years ago and now quite extensively disseminated. The Arnautka spring wheat did not yield well. Either this section is not favorable to the growth of spring wheat or the farmers do not understand raising it. The Saxonian barley was quite productive. The White Schonen oats stood up well and yielded heavily The variety promises to be a most valuable one. The Black Swedish oats lodged badly.

Bergen County, N. J.—The Rough Chaff wheat was sown October 3, 1868, in the same field with the Mediterranean, and at the same time. The first named variety obtained a good stand before winter, and looked well in the spring, but failed to ripen sufficiently early to escape rust. The stalk was very much rusted, and the grain shrunken and very poor, while the Mediterranean gave a good average crop.

Ocean County, N. J.—The peck of Rough Chaff wheat, sent me last September, was sown carefully by an experienced farmer. The result is unfavorable—the heads are poor, grains shriveled and imperfect. It was sown thinly; ground well manured, soil a clay loam. Other wheat near, sown and treated in the same way, produced more than the average of excellent grain.

Tioga County, Pa.—The Tappahannock wheat is ten days earlier than any other variety that is grown here, yields well, and is very plump and nice looking. I think it will prove a valuable wheat for this region. The Excelsior oats proved excellent and gave a good yield, ripening in ninety days from sowing; a measured bushel weighed forty pounds. The White Schonen oats are of good quality, but ten days later; a measured bushel weighed thirty-six pounds. The Black Swedish are worthless—too late.

Greene County, Pa.—The Tappahannock wheat is successful here.

Baltimore County, Md.—The Tappahannock wheat that was distributed by the Department has proved a valuable variety generally. The Mediterranean is still extensively sown in this county, north and south, and is yet the champion wheat. It has been sown and resown on the same soil, until it has deteriorated very much, but it is still considered a sure and reliable variety. Farmers are to be blamed themselves that wheat is deteriorating so rapidly. Too thick seeding is a great evil; it is the cause of the many small heads and kernels, weak and sickly stalks, with the berry not brought to the full development. The wheat is again sown and resown, and deterioration is the consequence. The small and sickly grains should be carefully separated by screens, &c., and only good and plump seed sown. Sowing with the drill is a great improvement, and one and a quarter bushels per acre is sufficient seed. If the Mediterranean should be again imported in its prime state it would undoubtedly be a great benefit to the country.

The Talavera wheat that was sent to me was carefully experimented with by myself and two other practical farmers; the result was a failure. This variety may be adapted to more northern climates.

The Saxonian barley, White Schonen oats, and Black Swedish oats, were each carefully sown by myself and three other practical farmers; each variety proved valuable, the Schonen oats in particular—a magnificent variety.

Montgomery County, Md.—The Talavera wheat sent me by the Department proved a failure. The cause seemed to be the want of a longer season to mature in. It was sown about the middle of October. Perhaps it should have been put in during September.

District of Columbia.—Sowed on the 20th April one quart each of Somerset and Black Swedish oats, on land of equal quantity and of the same quality. Both kinds came up evenly and seemed very promising, the Somerset, however, taking the lead, and sending out very broad, green stalks, which kept the lead all the season. This variety ripened ten days sooner than the Black Swedish. One quart of Somerset yielded forty-four quarts, weighing thirty-eight pounds per bushel; one quart of Black Swedish produced twenty-six quarts, weighing twenty-six pounds per bushel.

Madison County, Va.—Wheat is yielding well. Many of our best farmers are making ten to twelve bushels for each bushel sown, throughout the crop. In my own case, twenty-three acres of clover, fallow corn, and tobacco land were seeded with Lancaster, Tappahannock, and Poland wheat. From twenty-seven bushels sown I have between nine hundred and one thousand shocks of one dozen sheaves to the shock; it seems but reasonable to suppose that it will average twelve quarts to the shock, which would aggregate say four hundred bushels. No fertilizer was used except five hundred pounds guano, which was applied to the corn land. The Poland and Tappahannock did best.

A neighbor tried the following experiment for seeding one and a quarter acres in Lancaster wheat: For the lot twelve hundred pounds Peruvian guano was used; eight bushels sown on the lot; yield fifty-six bushels. The growth of straw was very heavy.

Cumberland County, Va.—The English Rough Chaff wheat sent from the Department proved a failure—it might properly be called "English all chaff." The red purple stem, growing on either side yielded a fine crop.

Buckingham County, Va.—I received from the Department last fall fourteen pounds of Rough Chaff wheat. I gave all but one pound to my assistant. It was sown on the 7th of October, on a corner of a lot, put down at the same time and in the same manner with the Tappahannock wheat. It grew beautifully till the drought set in, but coming into bloom in hot, dry weather it failed to mature, and is not worth threshing, while the Tappahannock on the same field made a fair crop. I saw this wheat in the field about the 24th of June, when the Tappahannock was being harvested, and it certainly looked well then; the heads were large and well filled, it had tillered finely, covering the land well, was about two feet high, had a stiff straw, and altogether was the prettiest wheat I ever saw in the field—but, I regret to say, it is about two weeks too late for this latitude. The Tappahannock has well nigh supplanted all other kinds of wheat in this county.

Northumberland County, Va.—The peck of Tappahannock wheat received from the Department last year was sown on corn ground without any fertilizer; yield ten pecks of very fine grain.

Clarke County, Va.—The English Rough Chaff wheat will not mature

in this climate. It made a beautiful head, but dried before it filled; while the Lancaster wheat, growing by its side, made a very heavy crop.

Smyth County, Va.—The Tappahannock wheat gave a good yield of very fine quality. I should judge it to be a good variety for this section.

Petersburg, Va.—A small package of garden seeds was received from the Department last spring, and on so much of the product thereof as has come to maturity, the following notes are offered: French Breakfast radish; early, crisp, and very fine. Early Yellow beans; not among the earliest, but of superior quality. Green Curled endive; growth very luxuriant. Red beet, early and excellent. Durmott's First Early peas; a very early variety, and possesses the merit of maturing the crop pretty much at the same time. It is a kind worthy of cultivation. Carter's superior peas; a fine, rich variety, very luxuriant and very productive. Late Long Green okra, with pods answering to the descriptive part of the name; a desirable variety. Strasburg onion; in our climate we can only succeed in raising sets the first season. An abundance of these has been saved, of fine appearance. Phinney watermelon; small and of no value, though the season for melons has been better than usual. Superfine cabbage; very early, and looks admirably; an excellent early variety. Incomparable cabbage; promises well, and is beginning to head very handsomely. Large Late Drumhead Savoy; too early to express any decided opinion, but it has a vigorous growth and is of good promise. Lenormand's Short-stemmed cauliflower, and Snow's White broccoli; both of these gave the finest promise until pinched by the dry weather. The plants are now in a suffering condition, but not so far spent but that good results may be expected on a favorable change of the weather.

It may be proper to add in regard to the vitality of the seeds, that apparently every seed of all the kinds sent, promptly vegetated. In an experience of many years, the writer believes he has never had anything to equal it.

Pulaski County, Va.—Several of our farmers have tried the Arnautka spring wheat, but, I believe, in every instance failed. My crop about half matured. I concluded to try it as a winter wheat, although the seed was very light. Sowed in the fall, and was surprised to find that it filled out and yielded heavily.

Lenoir County, N. C.—I received one peck of Tappahannock wheat from the Department last fall. Prepared about one-fourth of an acre of ground well and sowed the wheat broadcast. It came up well and made an excellent crop. I saved about five bushels of good wheat. It had neither smut nor rust. The grain is large and full and as good as the seed sown, probably better.

Surry County, N. C.—The Tappahannock wheat sent last fall yielded well; one of my neighbors sowed two quarts which made one and three-fourths bushels of excellent wheat, sowed on upland clay soil.

Stokes County, N. C.—The twelve pounds of Tappahannock wheat received from the Department last fall were sowed and made one hundred and fifty-five pounds. The wheat was seeded late. I think with early sowing it will be a success in this county.

Lincoln County, N. C.—About one quart of Arnautka spring wheat was sent to me by the Department; was received on the 15th day of March and sown the same day, in drills eight inches apart, in stiff clay soil with a mixture of coarse sand, well manured and cultivated twice with the hoe; harvested on the 1st day of July; yield one and one-fourth bushel—would have produced more, but, owing to wet weather before

harvesting, had something like blight, or rather rotting of grains in some of the heads. The quality of the sound wheat is good, but not equal to the seed sown, being some what shrunken. The heads averaged forty grains.

Haywood County, N. C.—The Tappahannock wheat received from the Department was sown and made a fair yield for this county, though not the best. It promises well on highly improved or new land, but does not do well on thin land. It is thought it will average about twelve bushels per acre, and what I raised this year weighs fifty-four and a half pounds per bushel.

Iredell County, N. C.—Five pounds of Tappahannock wheat sowed in November on common land produced ninety pounds of fine wheat.

Sampson County, N. C.—The Tappahannock wheat, one peck, received from the Department last fall, was sown on the 20th of November, on eight hundred and forty-four square yards of land—soil, sandy loam. A good dressing of stable manure was put upon the top after the land had been well broken, and wheat and manure harrowed in together. It was harvested June 10, and yielded six bushels, equal if not superior to any wheat I ever saw for fullness and freedom from disease. It will be the main crop of wheat here now, as it ripens so early.

Jackson County, N. C.—The kohl-rabi proves a valuable acquisition to our garden crops. White Silesian beet and Yellow Mangold are excellent crops in this soil and climate. China beans and White Japan melons are not valuable here.

Harnett County. N. C.—Madeira onions, very fine. Carter's first crop pea, the Avunca, and McLean's, severally, did well. China bean, Early Yellow, and Kidney beans turned out well. Early Vienna kohl-rabi did well. Drumhead Savoy cabbage, very fine. Large Green Curled, and Ruffled endives, very fine. James's Scarlet carrots, very good, as also the White Tipped Scarlet Oval radish.

Chowan County, N. C.—McLean's Little Gem is a fine pea and very early. The White Tipped Scarlet Oval radish did well, and is fine flavored, mild and sweet. James's Scarlet carrot yielded a fine crop, as did also the Student parsnip. Cabbages, Kemp's Incomparable, Carter's Early, and kohl-rabi were injured by the drought. Early China bean was a successful crop, prolific, and very delicious. Large Madeira onion can be grown of good size in one season from the seed. Black Spanish watermelon does very well.

Montgomery County, N. C.—Five quarts of the Tappahannock wheat received from the Department was sowed in the same field with another kind regarded as the best wheat now sown in the South, the Purple Straw. Soil and treatment the same. The Tappahannock ripened about four days earlier than the Purple Straw, yielding thirty three bushels to one of seed, the other variety yielding only ten to one. Think the Tappahannock an excellent variety, suited to the soil, and less subject to the rust which so often diminishes the yield of the later varieties.

Bertie County, N. C.—The Tappahannock wheat proved a perfect success. I sowed on land that had produced a crop of corn and peas. Turned in the stalks and vines with one hundred and fifty pounds of No. 1 Peruvian guano per acre. Sowed the wheat on high beds, September 20th, and dragged in with a heavy brush. It came up quickly, and looked well until winter set in, when about two-sevenths were killed by freezing. The seven quarts yielded two hundred and eighty-seven quarts of as nice wheat as I ever saw.

Chowan County, N. C.—The Tappahannock wheat turned out well. It is eight or ten days earlier than the other varieties sown here.

Columbus County, N. C.—Tappahannock wheat gave good satisfaction. Grain pronounced by good judges to be excellent.

Harnett County, N. C.—Tappahannock wheat sowed October 29th, 1868, on land lightly covered with stable manure. Ripened about the 20th of June, yielding thirty-two fold. It is the finest wheat I have ever seen, and seems adapted well to this climate.

Rowan County, N. C.—The ten pounds of Tappahannock wheat received from the Department were sown October 20, 1868, on one-third of an acre and were harvested June 25, 1869, yielding five bushels, weighing sixty-two pounds to the bushel—being in ratio to the quantity of seed as thirty-one to one. The Arnautka spring wheat, one and a half pound, was sown March 20, 1869, on one-tenth of an acre, and harvested July 6, following, yielding fifty-nine pounds—being in a ratio of thirty-nine to one. It was received and sown rather late in the season, and consequently the grains did not fill out. It should have been sown two or three weeks earlier. It is thought to be an excellent wheat for this climate.

Caldwell County, N. C.—The two packages of wheat sent me in September, 1868, were carefully sown in good land, well prepared. The Rough Chaff matured but very partially; there were a few small grains in each head, but they were imperfect. The Talavera did better; but neither of these varieties seems adapted to this locality.

Greene County, N. C.—The following are found to be of excellent quality: Early Yellow, Early China, and Large Lima beans; Carter's Early, Kemp's Imperial, and Drumhead Savoy cabbages; James's Scarlet carrot; Green Curled endive; Long Green okra; Wethersfield Large Red, and Early Nocera onion; Carter's First Crop, McLean's Epicurean, Advancer, and McLean's Little Gem peas; Carter's Imperial Hardy Sweet, Devonshire, Graystone, and Foster's Hybrid turnips.

Abbeville District, S. C.—The twelve pounds of Tappahannock wheat received from the Department were sown in drills, October 30, 1868, on red, stiff land, manured with cotton-seed. March 25, following, a small quantity of Baugh's raw-bone superphosphate was sown broadcast and hoed in with a narrow garden hoe. The wheat was harvested June 3d, and yielded two hundred and seventy pounds, being in a ratio of twenty-two and one-half to one of seed. The Rough Chaff was treated in all respects like the Tappahannock, but proved at least three weeks later, and rusted so badly that the heads did not fill, and the product was valueless. The Talavera also proved to be a late wheat and rusted badly, and, though not so complete a failure as the Rough Chaff, was not worth harvesting. Had the Tappahannock been sown about the middle of October it would, perhaps, have escaped rust altogether. The Tappahannock is suited to this climate; the other two varieties named are not. The Ramie or China Grass sent me did not vegetate; not a single plant came up.

Dawson County, Ga.—The Tappahannock wheat was sown about the 29th of October, 1868. On common wheat land without extra preparation the yield was thirty-five fold; and in one case, where sown on land manured by the droppings of sheep, the yield was forty-five fold.

Newberry County, S. C.—The Tappahannock wheat received from the Department yielded well, producing very fine grain. This variety promises well and is surpassed only by one variety, a red spring wheat, which ripens a few days before the Tappahannock, which gives it the advantage in seasons when rust makes its appearance.

Union County, S. C.—One peck of Tappahannock wheat sown early in October on land which had been in wheat the year before, yielded seven

and three-quarter bushels fine wheat, weighing sixty-two pounds to the bushel. A good variety for this section.

Union County, S. C.—The Pine Apple beet is a fine variety; McLean's Little Gem is good, and his Epicurean is a fine and prolific variety; the Eugenie, however, is the queen of peas. The White Lisbon onion, the large Madeira, and the Tripoli all promise well.

Clayton County, Ga.—The Tappahannock wheat sent me last fall does finely in this climate. It is a little late, and was somewhat injured by the rust, and I have some fears that it may be liable to rust here; but if it is not it will be the very wheat for this country, for it is the best headed and best filled wheat I have ever seen. It had a little extra chance, of course, but the yield was sixty-fold, which is very remarkable here.

Butts County, Ga.—The Tappahannock wheat received from the Department was drilled in rather late. It produced at the rate of thirty bushels to the acre. Some rust, but the grain was not injured, but was as full as the seed sown. I think it will succeed in this latitude. The Tripoli onion has matured well, and is tender, mild, juicy, and crisp. It is the best variety I have ever tried. It leaves no taste in the mouth after it has been swallowed. The large Madeira is also a good onion, larger than the former.

Polk County, Ga.—The package of Tappahannock wheat received from the Department last fall was sown broadcast on upland, highly manured with barnyard manure; yield five hundred and eleven and a half pounds of as fine, plump grain as I ever saw.

Gordon County, Ga.—The Tappahannock wheat did well, yielding twenty-four quarts to one sown.

Hall County, Ga.—Twelve pounds of Tappahannock yielded eight bushels of good wheat, sixty-five pounds to the bushel, or forty-five to one.

Carroll County, Ga.—I am convinced that the Tappahannock wheat is the best ever introduced into this county. My crop weighs sixty-five pounds to the bushel, and makes fifty-four pounds of flour, the best I ever used.

Camden County, Ga.—The Dan O'Rourke peas were planted March 4, and did finely, ripening the second week in May, and bearing heavily through June.

Crawford County, Ga.—The Tappahannock wheat is quite a success. It is early, comparatively free from rust, very prolific and heavy, weighing at least four pounds to the bushel more than the kinds usually sown here.

Crawford County, Ga.—McLean's Advancer pea is early, prolific, very sweet, and well adapted to our soil and climate. McLean's Little Gem, succeeding the Advancer in season, is an excellent variety, yielding largely; and the same may be said of Carter's Surprise and McLean's Wonderful peas, which follow next in season. Carter's Early and Kemp's Incomparable cabbages are not suitable to these southern regions. The Large Late White Drumhead and Stonemason cabbages are well suited to this region. The Leonard Short-stemmed cauliflower and the Early White Vienna kohl-rabi succeed well. The Large Tripoli and White Lisbon onions are two of the best varieties I have ever seen. The Cedar Hill and Maupay's tomatoes are unsurpassed.

Leake County, Miss.—The Tappahannock wheat sent to me was sowed and turned out quite well; five quarts produced three bushels of an excellent quality.

Winston County, Miss.—Two quarts of Tappahannock wheat, sown October 1, 1868, yielded a half bushel. I put it in as I did my common

wheat, without manure. The Tappahannock matures about a week or ten days later than our common red wheat.

Coosa County, Ala.—Having made the second year's experiment with the Mediterranean wheat sent from the Department, we now regard it like many other kinds of wheat which we have been sowing here more or less every year; that is, that while it does not seem to be so well adapted to this region as the Purple Straw or Blue Stem, we can rely upon it for a passable yield. It seems to be subject to the infections of smut and rust as much as any variety we have, and the quality of its flour is not altogether as good as that made from some other varieties.

With the Tappahannock wheat we have made but one year's experiment, hence cannot report with certainty as to the adaptability of this variety to our climate and soil when sown for a general crop, and to take its chances with other varieties, but we are inclined to think it will suit us better than the Mediterranean.

Clay County, Ala.—Tappahannock wheat in this county has proved a success. It has yielded as high as forty-fold.

Lee County, Ala.—Dunnet's First Early pea is valuable as an early variety; Carter's Superior pea is a better bearer. Of the two kinds planted on the same day, Dunnet's matured for seed before Carter's was ready for the table. Early Yellow bean is early, and a good bearer. Cedar Hill tomato is a profuse bearer, good size, excellent quality. The large Winter cabbage, or Madeira lettuce, very fine. Green Curled endive grew rapidly, and became large and tender, but was sun-killed in June. Large-sized Lima bean does not bear as freely as a smaller variety here.

Union County, La.—The Tappahannock wheat sent to me last fall was sown on good soil, well prepared, but was entirely ruined by rust in the spring.

Putnam County, Fla.—Cook's Favorite tomato, Long Green okra, Improved New York Purple egg-plant, Brill's Extra Early sweet corn, White Japan muskmelon, and Phinney's Early watermelon, all flourish well in this region. Cook's Favorite is at least two week's earlier here than the Tilden, and the Large Smooth Red tomato matures more evenly, is of thicker and firmer pulp, and is one of the best varieties for this section that I have ever seen.

Grayson County, Texas.—Of the Tappahannock wheat sent last fall, four quarts yielded about five bushels. It was not sown till late to avoid the grasshoppers. I think if sown in time it will give a fine yield.

Dallas County, Texas.—I sowed eleven pounds of Tappahannock wheat which yielded one and a half bushel of good quality. I will try it again this fall, sowing earlier.

Ellis County, Texas.—Our wheat crop was rather indifferent this year, averaging about twelve bushels to the acre. The Tappahannock did better than any other variety, yielding about sixteen-fold—the grain not quite so large as the seed planted, but full. It will become a favorite variety here. I did not succeed well with Ramie; perhaps did not plant properly. Cook's Favorite tomato gave good satisfaction; flavor excellent. The Orange Globe beet is the earliest I have raised; has a fine flavor, grew very large—twenty inches in circumference. The Imperial Sugar beet, a fine variety, did well. Dewar's Dark Long Blood beet came up well. Carter's Early cabbage matures sooner than Early York, and makes a better head; Stonemason did well, heading early; Kemp's Incomparable is not so good as either of the preceding varieties. Seeds of the Weathersfield onion came up finely, growing fully large enough for table use. The true Yellow Danvers is the earliest onion I have had, and grew even larger than the Weathersfield. The Early Nocera did as

well as the Weathersfield. Carter's First Crop pea did well; is from three to seven days earlier than Landreth's Extra Early. Carter's Advancer and McLean's Little Gem both did well. Carter's Superior is a later pea, of the dwarf variety; is a great bearer, producing better than any variety known to me. The different varieties of seeds received here are an acquisition to the county.

Harrison County, W. Va.—The White Schonen and the Black Swedish oats did tolerably well, but I think the grain inferior to that sown. The black oats are much later than other varieties, and may be valuable on that account.

Upshur County, Texas.—The Ramie experienced a severe trial by the drought of August, but the only injury experienced was a stoppage of growth. I cut off some of it, and a new crop is now two feet high. That left standing is now full of seed. The Large Green Curled endive is large and fine, a great grower, reaching the height of three feet when in seed. The Nocera, Wethersfield Large Red, and Yellow Dutch onions were destroyed by cut-worms. The Lima beans, such of them as have survived frost and worm, have done well, and are continuous bearers, not injured by drought. The white Japan muskmelon is the best bearer we have and is well flavored. The Yokohama squash is in fact a dwarf pumpkin, and when ripe is very fine, cooked as such. Stowell's sweet corn is an early variety, very prolific, and giving fine roasting ears. Bates's sweet corn is a later variety, but equal, or superior, in flavor, and much larger. Both varieties succeeded well.

Crawford County, Ark.—Tappahannock is believed to be by far the best wheat for the soil and climate of Western Arkansas. Experiments in growing it have given great satisfaction.

Drew County, Ark.—I sowed the Tappahannock, received from the Department, on ground well manured with guano. The crop was the finest I ever saw until the grain came into the milk state, when innumerable flocks of rice birds commenced devouring it. I was compelled to harvest the remnant before it was ripe. On account of early sowing and manuring it headed earlier than any other wheat in the vicinity. I do not think it is an earlier variety than the little red May wheat most generally sown here, but it is more productive. The peas received from the Department were all productive, especially the Advance. White Japan muskmelon, small and only tolerably productive, but the sweetest and highest flavored of any known to me. Carter's Yellow tomato is productive, of fair size, and excellent quality—an acquisition. Extra Curled parsley and Green Curled endive are both very fine. Imperial Sugar-beet, of medium size and of the highest flavor. Sweet German turnip very productive, and of unsurpassed quality, but, like all ruta bagas, does not perfect seed in this climate.

Columbia County, Ark.—The Tappahannock wheat is earlier than most of the wheat in the county. The Scarlet Tipped radish proved an earlier variety than any we had, and did finely. Early White Vienna kohl rabi has done well; all who have tried it are well pleased. Cook's Favorite and Keyes's Early tomato do finely, and give general satisfaction. Early Narragansett Sweet corn matures earlier than any variety in the county. The melons were fine, but not better than several varieties we have here, watermelons particularly. Lima beans fine and large. Not more than one person out of six who tried the Ramie seed had any plants come up. The plant looks well, but seems to grow quite slowly, probably on account of want of proper care and cultivation.

Montgomery County, Ark.—The Tappahannock wheat is a week or ten days later than the common May variety raised in this county. The only

objection to this wheat is that it does not ripen sooner, and thus escape the danger of rust.

Brooke County, W. Va.—I send herewith specimen heads of "Polish wheat from Odessa," raised from seed sent from the Department last year. It is a late wheat, heads light and chaffy, poorly filled, and with very long beards, and is of little worth. I send specimen heads and some shelled wheat of the White Diehl, which is a superior sort. Also some of the Witter wheat, (amber,) celebrated for the fine quality of its flour. The Tappahannock wheat (one peck) sent me from the Department has done well, producing about forty sheaves, which will yield about two and a half bushels of excellent wheat.

Jefferson County, W. Va.—One peck of Tappahannock wheat, received October 3, 1868, was sowed on the 10th of the same month, on corn stubble; sown broadcast and plowed in; soil about second quality, manured some during the winter; damaged a little by freezing out; matured well, and rather earlier than bearded wheat. Though some distance from the house, the fowls injured it a little; but we saved three bushels and twenty-three pounds of beautiful wheat, fully equal to the seed. The seeds received last winter—Black Swedish oats, White Schonen oats, Probstier barley, and Saxonian barley—were sown April 8, and harvested July 23. Both kinds of barley were badly rusted, and we threshed them together, saving some fourteen quarts of tolerably fair grain, intending to give it another trial, and, if possible, under more favorable circumstances. The White Schonen oats gave six quarts, and the Black Swedish oats eight quarts of good grain; some of each kind were wasted. Both these varieties of oats appear well suited to this section, but have not had a fair trial yet. The Tilden tomato is an excellent variety, the earliest that we have, and the best; do not think it can be surpassed in flavor; of fine size, and well worthy of cultivation. The results of the following seeds have been reported to me: "Yellow Danvers onion yielded well; though sown rather thickly, some of the bulbs became large enough for table use; a very good variety, almost as good as the White Lisbon; well adapted to this vicinity; have not tested its cooking qualities or flavor yet. The Madeira onion is not so valuable a variety as the Danvers, many of the bulbs failing to mature sufficiently to be kept during winter; will give it a more extended trial before deciding on its merits."

Morgan County, W. Va.—There has been great success in potatoes, especially the Early Rose, being the first in time and quality. The White Mercer is preferred for summer use, and the White Peach Blow for the winter potato. Sweet potatoes yield well in quantity and quality, but the seed must be continually renewed from the Chesapeake region. The yellow and red are both grown successfully. Artificial fertilizers are much more used than formerly, and, apparently, with great profit on these lands.

Braxton County, W. Va.—The Tappahannock wheat has fully satisfied expectation, and it is the general opinion that it is the best wheat that has ever been raised in this county, being hardy, early, of good quality, of standard weight, and yielding well. One of my neighbors sowed six pecks, in the common manner, on average land, without manure, and harvested twenty-four bushels, by measure. The Ragan White rye is very fine, and well adapted to this section.

Russell County, Ky.—The Tappahannock wheat sent me has turned out very finely, ripening earlier, grain larger, heavier, and yielding more than any wheat we have ever sown. Think it the best wheat for this climate. The White oats sent from the Department promise well. The

quantity received was hardly sufficient to judge of their value. The product, sown next spring, will prove their value here.

Owsley County, Ky.—The wheat crop exceeds my expectations. It is fully double the crop grown last year. Four pounds of Mediterranean wheat sown last fall produced one hundred pounds of good wheat. The Mediterranean grows far better than any other wheat in this county. The Tappahannock wheat yielded about sixty pounds to the bushel.

Scott County, Ky.—The Tappahannock wheat received last fall has done remarkably well, yielding about thirty-fold, and ripening from seven to ten days earlier than our other varieties.

Hopkins County, Ky.—The peck of Tappahannock wheat sent me by the Department, last fall, was sown broadcast, on fair tobacco land, on the 10th of October. It yielded eleven pecks of fair wheat, ripening about ten days earlier than the Mediterranean.

Boone County, Ky.—Tappahannock wheat yields more and ripens earlier than any other wheat grown in this county.

Livingstone County, Ky.—Without extra care or manuring, forty quarts of beautiful wheat have been harvested from one quart of Tappahannock.

Munroe County, Tenn.—The Tappahannock wheat sent me by the Department, last fall, was sown October 16th, on fresh land; it yielded well. For several years our principal crop has been of this variety. It is regarded as an excellent wheat for this climate.

McNairy County, Tenn.—The Tappahannock wheat does exceedingly well in this county; it stands the winter well, and is earlier than other varieties, and matures finely.

Sullivan County, Tenn.—The Talavera wheat has had a fair trial in five different localities in the county, and has proved a failure. The Odessa, or Russian Spring wheat, was received too late for a fair trial, but did well, yielding fifteen-fold on medium upland. The White Somerset oats are a valuable acquisition, yielding thirty-fold of the finest grain I ever saw. The Drumhead Savoy cabbage has done well. Yellow Danvers and Early Nocera onions were planted with the expectation of getting sets merely, but to our surprise produced fine large table onions. The Early Yellow bean is early and good.

Obion County, Tenn.—The Tappahannock wheat was sown November 1, proved hardy, and stands wet land better than any variety we have in the county. It yielded at the rate of eleven and one-half bushels per acre, more than an average for this section. Carter's First Crop and Saxton's New Early Prolific peas are preferable to other varieties. Stowell's Sweet corn is very early and prolific. The Large White Kidney bean, very prolific, but too tough for a summer bean. Long's Purple egg-plant did not come up. Nutting's Selected Dwarf beet proved a failure. The Imperial Sugar and Long's Blood-red beets are very fine, and well adapted to this climate and soil. Abergelde's kale is the finest I ever saw. Kemp's Incomparable, Carter's Early, and Tom Thumb cabbages all did well, but I prefer Kemp's Incomparable.

Washington County, Tenn.—Of the garden seeds sent me, the English peas were all sown the same day, consisting of Carter's First Crop, McLean's Little Gem, McLean's Imperial, and the Advance. They matured in the order named, and furnished a succession for the table for two months. The Evergreen and the Sweet corn did finely, and were in roasting ears before the dry weather commenced. The Student parsnip stood the dry weather well.

Phelps County, Mo.—Raised ten pounds of Tappahannock wheat from one sown the year before, and with the ten pounds (eight packages) sent

me last year, October 6th, I sowed twenty pounds Tappahannock wheat on corn ground, sandy loam, plowed six inches deep with turning plow, and well harrowed in and rolled in the spring. It was harvested June 18th, full three weeks earlier than other wheat in the same field sowed at the same time, and with the same culture. It was the first threshed in a new machine, to avoid mixing with the other wheat, and probably a peck remained in and about the machine, but I had four hundred and sixteen pounds of clean plump wheat, or about six and three-quarter bushels, weighing sixty-two pounds to the bushel, about twenty-one to one sowed; while my other wheat in the same field only yielded eleven to one. I think it will prove to be the best wheat for this county.

Stoddard County, Mo.—Our farmers are in ecstacy over the Tappahannock wheat sent me the last three years. Its lowest yield is thirty-five bushels per acre, its berry being unsurpassed. We sow only six-eighths or seven-eighths of a bushel per acre. It is by far the best wheat I have ever seen grow here.

Miller County, Mo.—On the 15th of last September I sowed four acres of Tappahannock wheat, which was threshed a few days ago and yielded thirty bushels to the acre. The grain is quite as good and heavy as the seed received from the Department, and is pronounced No. 1 by good judges.

Perry County, Mo.—The Excelsior oats have more than fulfilled all the expectations entertained of them, yielding, on good upland, over eighty-fold, and producing a heavier grain than the original seed. Sown on bottom land the yield is lighter and the grain smaller. This variety of oats may be harvested with the reaper, on account of its strong stalks. The Excelsior is a very valuable acquisition for our southwestern counties.

Howard County, Mo.—The Tappahannock wheat proves a very valuable variety. From a quart received in 1866, and sown each fall, the product is one hundred bushels plump wheat, far superior to any grown in this section. It yielded about one-third more than other varieties, or thirty bushels per acre, weighing sixty-six pounds to the bushel. For seed it is worth double the price of other varieties here, being ten days earlier than May wheat.

Cedar County, Mo.—I consider the Tappahannock to be an excellent variety of wheat for this soil and climate. Its introduction here should be encouraged by all means. The peck of Tappahannock wheat received was sown October 17th, on new first year's brush land, after cutting off the corn, and was harvested June 15th, giving a very good yield, clear of rust and smut. This variety appears to be hardy, and an excellent one for this climate and soil.

Benton County, Mo.—I received from the Department about one and a half pint of White Schonen oats, which I sowed on good, rich old soil. Harvested August 1st. The product showed an increase of nearly fifteen-fold. The land sown was about two-thirds of a rod. Judging from this, it would be safe to expect at least forty bushels to the acre.

Cedar County, Neb.—The Arnautka wheat and the Excelsior oats were received very late in the season, but have done exceedingly well and given a very large yield. Our seasons are short, and we require seed that matures early.

Miami County, Kan.—One quart of White Schonen oats, sowed broadcast, April 5th, produced sixty quarts, weighing thirty-three pounds to the bushel. Somerset oats, sowed same day, yielded fifty-four quarts, forty-one pounds to the bushel. Last-named variety ripened ten days sooner than the former.

Nemaha County, Kan.—One quart of White Schonen oats yielded two

bushels—excellent grain. One quart Black Swedish oats yielded one and a quarter bushel—a good variety. One pint of Probstier barley yielded one-half bushel, a better variety of spring barley than we have had here. Early Narraganset Sweet corn is very productive and good; Asylum Sugar is too much inclined to smut and mold; Early Purple kohl-rabi is a good variety, much prized. Hall's Westburgh Swede turnip is an improvement; I have a fine crop from seed furnished by the Department. Quintal cabbage looks exceedingly well.

Riley County, Kan.—The White Schonen oats, not yet threshed, promise an abundant yield. Brill's Early Extra Sweet corn, sweet and tender, but ears small; Burr's Mammoth, large ears, excellent quality. Early Yellow beans, prolific and of good quality; Early China, good quality, but moderate yield; Early Purple Vienna kohl-rabi, large, hardy, and good quality; Large Green Curled endive, an excellent grower, but a little tough and bitter. True Yellow Danvers onion, good size and very uniform; Large Tripoli, latest, uniformly very large; Weathersfield Large Red, mostly good size; Early Nocera, ten days earliest, moderate size, inclined to divide; White Lisbon, moderate size, divides some; Large Madeira, uniformly very large. Carter's First Crop peas, ready for use in sixty days, a very good early pea, of moderate yield; Advancer, ten days later, very prolific, and of superior quality.

Jackson County, Iowa.—So far as the Tappahannock wheat has been reported upon by the farmers in this section, to whom distribution was made late last fall, it has yielded at least twenty-fold, notwithstanding a very unfavorable season. The opinion is, that under favorable circumstances it will prove a very profitable fall wheat.

Clinton County, Iowa.—The Arnautka Spring wheat was sown April 24th, on ground in good condition, came up well, and grew rapidly until heading out, which was eight days in advance of the Tea and Scotch Fife wheats, sown by the side of the Arnautka and at the same time. But about July 1st it began to blight, and continued to grow worse until it was all dead. There was some scab on the Tea and Scotch Fife, but they will yield fifteen bushels per acre.

Muscatine County, Iowa.—The Tappahannock wheat received from the Department last fall has proved a failure. I think, however, it is not the fault of the variety, but rather the extreme lateness of the season (October 4) when I received it.

Linn County, Iowa.—The Tappahannock wheat a total failure. Looked first-rate at setting in of winter, but by 1st of April not a stalk was standing; completely winter-killed. Arnautka wheat also total failure; lodged before heading, and not a kernel perfected.

Jones County, Iowa.—The Somerset and Black Swedish oats, one wine-quart of each, were sown April 22d, on upland prairie soil fifteen years under cultivation, without manure, and possessing some fox-tail grass seed which, owing to the wet season, closely covered the ground unoccupied by the oats, perhaps shortening the crop. The Somerset oats harvested thirty-seven pounds, the Black Swedish twenty-seven pounds; a better yield than that of our common oats, but not equal to that of the Norway. The Somerset were about two weeks earlier than the Black Swedish, and are the handsomest oats I ever saw. Both these varieties have a very stiff straw. I cannot pronounce on their comparative merits as feed.

Clayton County, Iowa.—Five pounds of Excelsior oats harvested seventy-eight pounds; forty-one to the bushel.

Floyd County, Iowa.—Carter's Leviathan pea is of large size and good quality, a great bearer, first-rate in every respect, attaining a height of

five feet; the Peabody is a dwarf pea, but a good bearer; I think it would do well for field culture. Crosby's New Sweet corn is early and good; Stowell's Sweet corn is an excellent late variety. Carter's New Yellow Mangold beet is of good quality, large size, and well adapted for feeding cattle. The same may be said of Carter's New Red Mangold beet. The Dwarf Blood and New Pine Apple beets are first-rate in quality. The Selected Scarlet carrot, good for table use and for stock. In respect to the onions, the White Lisbon is very large, and of good quality. The Large Tripoli and the Large Madeira are very large, but late. The Early Red Globe is not very large, but is of superior quality for summer use. The Red Weathersfield appears to be, in this region, the most suitable for the main crop—is of good quality, and keeps well. The Superfine Early cabbage is first-rate for summer use. The Drumhead Savoy, superior for winter use. Lenormand's Short-stemmed cauliflower is small, but good, and, in season, follows close after the Early Paris. The Early Round parsnip is very good for early use; the Hollow Crown, best for the main crop.

Fulton County, Ill.—On the 1st of November, 1867, I received a package of Tappahannock wheat, (1½ pound.) which I sowed immediately. It barely came up that fall. In July, 1868, I threshed twenty pounds of wheat equal in quality to that sown. I sowed the twenty pounds on the 15th of September, on thirty-two square rods; harvested on the 5th of July, 1869; threshed this week six bushels of as fine looking wheat as could be desired. I received a peck of wheat last fall, said to be imported from Odessa. I sowed it, but it has proved unsatisfactory; will sow the product, two bushels, and report the result. I also received several packages of oats and barley, said to be imported from Europe; but the wet season has been too much for them, all falling before they headed out. The partial failure of the spring wheat crop the past two seasons has produced a disposition among farmers to return to winter wheat. The winter of 1842–'43 was very severe and caused our first failure of winter wheat, which had been successfully raised in our county since 1822 to the former date. In the harvest of 1843 many fields were entire failures, while others yielded perhaps the amount of seed sown. In the spring of 1843 I procured from the North five bushels of spring wheat, which was sown on four acres and produced one hundred bushels of wheat. Other parties the same spring received small lots, which was the introduction of spring wheat into this county. From that time it spread, and in a few years was the leading wheat crop, and for many years there has been twenty acres of spring wheat to one of winter wheat. But I am satisfied that in future winter wheat and rye will receive more attention than they have for some time past.

Crawford County, Ill.—The Polish wheat, received October 6, was sown on the 7th, and proved to be a very late variety; was struck with the rust and proved worthless. The Black Swedish and White Schonen oats were late, and were also struck with the rust and proved a failure. The Probstier barley was a failure. Large Red onion, an excellent variety.

Whiteside County, Ill.—The Arnautka spring wheat, sent from the Department, was sown April 13, 1869, two weeks late. It was badly blighted, probably in consequence of the wet season. The White Schonen oats were sown April 13th; extra quality; yield probably seventy-five bushels per acre; a desirable acquisition to the country. The Probstier barley was sown April 13th; good quality; yield probably forty bushels per acre; is worthy of further trial.

Massac County, Ill.—The Tappahannock wheat yielded very well, and is found to be suited to this country.

St. Clair County, Ill.—The Norway and Saxony oats sent by the Department have produced excellent crops. The dissemination of these valuable varieties ought to be encouraged.

Jackson County, Ill.—Three pecks of Tappahannock wheat yielded eighteen bushels.

Sangamon County, Ill.—Sowed White Schonen oats April 15th; yielded a fair crop of superior oats. I do not consider the Black Swedish oats much if any better than the common black oats of the country. The Probstier barley did well; heads long and well filled. Superfine Early cabbage planted in hot-bed March 31st; ready for table use June 28th; earlier, larger, and of better quality than Early York. Narragansett Sweet corn fit for table use in twelve weeks and three days after planting. Crosby's New Sweet corn matured about one week earlier. Asylum Sugar corn planted May 11th, and gathered for table use and drying August 14th. The Crosby and the Asylum are both of good size in stalk, ear, and grain; very sweet and prolific. In 1868 I planted Carter's First Crop peas, received from the Department, and gathered part of the crop for seed, carefully selecting the best pods first ripe and nearest the ground. In March, 1869, I received from the Department another package of the same kind. Part of these were planted by the side of the home grown, on 31st March. The latter were in full bloom May 21st, while the former were two days later. On the 5th of June, nine weeks and three days from planting, nearly all were ready for the table; the home grown, however, making the strongest growth of vines, of a darker green color, the pods larger and more abundant, and two days earlier. I cannot see that Dunnett's First Early is better in any respect than Carter's First Crop, after experimenting with both. The Large Smooth Red tomato, Lester's Perfected, and the Tilden, received from the Department, were carefully planted and tested; but none of them equal in earliness, uniformity of size, or smoothness, nor do any surpass, in productiveness or quality, the Tilden I have grown for several years.

Bureau County, Ill.—Notes on seeds received from the Department. October 10, 1868, sowed Poland, Tappahannock, Red Mediterranean, and California White Winter wheat. The last two totally winter killed; Tappahannock partially killed, and blasted before ripe; Poland grew well, but was attacked by scab and no perfect grains left in the heads. Sowed Arnautka spring wheat April 9, 1869; it throve well until the scab took the whole of it. Excelsior oats did well, as did also the White Schonen. Black Swedish oats grew well, but quality medium. Saxonian barley sowed April 2d; heads did not come out until middle of July, and amounted to nothing; soil, sandy loam.

Washington County, Ind.—The Tappahannock wheat has yielded quite well, but not greater than some other varieties. In several cases the smut has hurt it severely. Some parties have used vitriol on their seed and think it a sure preventive.

Spencer County, Ind.—I received thirteen pounds of Tappahannock wheat of S. W. Fairfield, in October last, and, at the same time, fifteen pounds from James Cavin, secretary of the Agricultural Society. I sowed both on the 12th of October, upon good land, from which tobacco had been cut. It stood the winter well for late-sown wheat. I did not note the date of harvesting, but of five varieties I was cultivating it was the earliest. It filled well. I threshed it by tramping out with horses to prevent mixing; yield ten and a-half bushels. I am very well

pleased with it. I received a small package of Schonen oats of S. W. Fairfield. Sowed on good land on the 15th of April; harrowed in carefully. Harvested about the usual time of harvesting oats; rubbed out one and a fourth bushel of seed of good quality.

Brown County, Ind.—I raised one and three-fourths bushel of Tappahannock wheat from eight quarts, sown broadcast, October 12th; harvested July 1st. Grain large and plump. I am convinced that it is a splendid wheat for rich bottom land.

Jasper County, Ind.—The ten pounds of Tappahannock wheat sent me by the Department was sown on the 24th of October, on sandy hazel land from which a corn crop had been removed. It was fully ripe by July 4th. About two per cent. was lost by admixture with other wheat, which I carefully plucked out in order to have only the pure Tappahannock. Yield, three bushels, weighing sixty-three pounds. It is admirably adapted to this climate.

Indianapolis, Ind.—The oats (one bushel each of Excelsior and Schonen) received last spring were sown, together with the common barley oats, on the 8th of April, each receiving the same care; and when ready for harvest it was difficult to decide whether the Excelsior and Barley were not identical. The Excelsior may have been a little heavier in grain, but the yield was large with each. The Schonen is a late variety, and I think good for feeding with the straw. The onions, beans, cabbage, &c., received, have all done well. Early Nigora onion did finely, ripening as early as those from sets put out earlier. Yellow Dutch promises well, while the Weathersfield has done magnificently. The turnips are on trial. An experiment with Early Rose potato gave, from three pounds planted, five hundred and thirteen pounds, with ninety-three hills yet to dig. About half the eyes were started in a hot-bed, while the rest were planted, one eye to the hill, in the open ground. Best results from those planted in open ground. The quality is unsurpassed. Rot and mildew have destroyed most of our grape crop. The Concord has suffered badly, while the Isabella and Catawba, heretofore suffering badly from rot, are comparatively free. This is a nut to crack.

Washington County, Ohio. Inclosed are a few heads of Rough Chaff wheat produced from that received from the Department last fall. I feel much disappointed at the result. It promised well until about the 20th of June, from which time it seemed to remain for several days without change except growing a little dull in color—my other wheat turning quite yellow. On examining it, I found that the stalks appeared to be dead and the grains filled, as you will see. I discovered no rust upon the stalks or blades. I regret very much that so fine a wheat should fail here, and hope that other persons have been more successful with it. The stalks were rather short, but large, and stood erect. If it does well with others I shall try it again.

Wood County, Ohio.—The Rough Chaff wheat, sent me last October, was sown, but it was so late that it did not come up until spring, and was so badly struck with rust that I fear not one grain in fifty will grow. The Tappahannock wheat received at the same time is also badly injured with rust, but most of it will germinate. The Russian Apple scions are all growing and doing well.

Logan County, Ohio.—The Tappahannock wheat is regarded as a success. It is ten days earlier than ordinary varieties, and the grain is plump and full.

Highland County, Ohio.—The Tappahannock wheat sent here from the Department is giving great satisfaction. One farmer reports that he

sowed the quart sent, with the following result: Product first year, twenty-two pounds; second year, four and a half bushels. From this, the third year, he has four acres, which he thinks will make one hundred and twenty bushels. The quality is very fine. It stands up well on rich ground, and ripens a week or ten days earlier than the Red Chaff. All the grains are perfect.

Hardin County, Ohio.—The peck of Tappahannock wheat sent by the Department produced three and a-half bushels of beautiful grain. It is earlier and better than the usual varieties of wheat cultivated here.

Champaign County, Ohio.—I received one quart of Tappahannock wheat from the Department three years ago this fall, from which I have this year raised and threshed one hundred and twenty bushels of as good quality as the sample, and have probably twenty bushels not yet threshed. All who see it want it. The low condition of the apples and peaches, after the fine appearance of early spring, is owing to the fact that the apples and peaches have mostly fallen off, caused by insects of some kind; and what remain on the trees are of a very poor quality. The Schweinfurt cabbage is large and fine, and ten days earlier than the Winningstadt, but not so solid; the Superfine Early, too small for a market variety; the Large Late Winter Drumhead Savoy, very large and fine.

Henry County, Ohio.—The Tappahannock wheat received two years ago from the Department has been grown two years in drills. The second season one bushel drilled, on one hundred and forty square rods, yielded twenty-two and one-half bushels, or at the rate of twenty-five and six-sevenths bushels per acre, while the Michigan White variety, in the same field, yielded only eighteen bushels per acre; the Tappahannock ripening two weeks earlier, and giving a much finer grain.

Mercer County, Ohio.—The Swedish oats received from the Department two years ago are a great success, ripening earlier, producing more bushels, and weighing one-third more than our common varieties.

Hancock County, Ohio.—The Tappahannock wheat gives excellent satisfaction.

Meigs County, Ohio.—John Karr sowed broadcast eight bushels of Tappahannock wheat on second or high creek bottom land; product, one hundred and eighty-six bushels of clean wheat. Robert Crambs sowed broadcast one and a half bushel on fallow ground, sandy hill land, formerly timbered with white oak and poplar; product, forty-eight bushels; the yield of one acre forty-four bushels and five pounds. Joseph C. Stewart raised forty-five bushels of Surprise oats, which averaged forty-five pounds to the bushel.

Bowling Green, Ohio.—The English Excelsior oats grow one foor higher and give much larger product than the common oats. The Narragansett Sweet corn proves a very early and good variety.

Rice County, Minn.—I received exactly eight pounds of the Arnautka wheat from the Department, which I sowed on the 27th of April last. The ground was new breaking, consequently the best for any kind of wheat in this country. I sowed, on the same day, Scotch Fife on the same kind of ground, in order to see which would ripen first. The Arnautka was fit to cut about one week earlier than the Scotch Fife. The straw or stem of the Arnautka is fully as strong as that of the Scotch Fife. It is a bearded wheat, and resembles the "Hedgerow wheat," formerly raised in Illinois, except that the heads are much larger. The berry of the Arnautka wheat is unquestionably the largest that has ever come under my observation, and I have every reason to believe that it is one of the best kinds of wheat for large yield that has ever been intro-

duced into this State. I think I can thresh about five bushels from the eight pounds sowed; at this rate the yield would be forty bushels from a bushel and four pounds of seed, or about sixty bushels to the acre, by sowing one and a half bushel to the acre. I do not think it will do quite so well on old ground that has raised wheat for a large number of years, but I do believe it will average fifty bushels per acre on any ground that is fit to raise any other kind of wheat.

Cass County, Mich.—The Tappahannock wheat received from the Department, the third crop of which has been grown here, I place among the very best varieties of white winter wheat, although the indications of last spring were that it may not be quite so winter hardy as some others.

Gratiot County, Mich.—The Tappahannock wheat has done well; the Arnautka was badly shrunk. The Schonen oats did well for the season.

Rock County, Wis.—The Tappahannock stood the winter until the last severe frost in March, which totally destroyed it. The White Schonen oats are all that they were recommended to be; Black Swedish oats ruined by rust; Surprise oats sustain their reputation well.

Green County, Wis.—I sowed the Tappahannock wheat October 1, but the season was unfavorable for winter wheat, and the product is small though the quality is good. The Arnautka was sown early in April, and yielded double the quantity of the winter wheat—quality good. The Schweinfurth cabbage excels any variety I ever tried to raise. Beets sent to me by the Department are of the largest size and finest quality. Nearly all the seeds have proved valuable.

Lane County, Utah.—I received twenty-seven pounds of Tappahannock wheat from the Department last fall, which I sowed on one-half acre of stiff clay land without manure, and have this day threshed it and have twenty-four bushels of good merchantable wheat. The grasshoppers have worked upon it all summer. I have done so well I shall try it again.

Box Elder County, Utah.—I think the Tappahannock wheat will prove a valuable variety for this section of the country. Its liability to smut can be obviated by wet-liming thoroughly, and then drying, about one month before sowing. The wheat should not be in the solution (which should be very thick) longer than thoroughly to mix.

CROPS IN OREGON.

Douglass County, Oregon.—The season has been remarkably dry. There was very little rain during the winter, compared with other years. We had no rain to speak of in March until the 29th, and not much then. It rained the whole of the twenty-four hours on the 16th of April, which constitutes the most of the rain we have had since the 9th of February, although we have had some light showers, in many instances not sufficient to lay the dust. Spring-sown crops, generally speaking, are very light. In many instances oats did not fill. The straw is also very short, making it difficult to save the grain. Autumn and early winter sowed grains are generally good. There is here and there a good piece of spring-sown grain, but it is the exception, not the rule, where the land was inclined to be damp. Grass of all varieties is the shortest crop I have ever seen in this valley. Corn is good, better than last year; it seems to stand the drought first-rate. This valley is the best part of Oregon for corn west of the Cascade Mountains. We have had no frost that would cut corn or vegetables since the 7th of March, and but very little during the whole winter. There were very slight frosts on the 23d and 27th of April and on the 25th of May, but not enough to injure vegetation. From what I can learn among farmers that have done their threshing, I do not think

wheat will average over fifteen bushels per acre; oats, twenty-five bushels; barley, twenty-five bushels—a very light average for this country. The average of potatoes will be next to none, unless we soon have rain in considerable quantities. The yield of corn will be good. The last week in April, and the first two weeks in May, this vicinity was infested with caterpillars to a great extent. They were so numerous that they denuded the black oak trees of their foliage in many places, and also injured the orchards to a considerable extent. My own orchard suffered the most, so far as I can learn. Out of nine hundred bearing trees, on the middle of May over seven hundred did not have a leaf left—leaves and fruit all destroyed by the ravages of the caterpillar, although I worked early and late to save them.

DRAINAGE FOR FRUIT TREES.

Hancock County, Ill.—Mr. Lewis Stracke, of Warsaw, in this county, has ten acres of land, one-fourth of which is occupied by his mansion and grounds, the remainder being orchard and vineyard. The whole tract is underdrained with tile placed at an average distance of forty feet apart, and at the depth of four feet. The size of the main pipe is three inches; of the minor drains, two inches. An example of the operation of this system of drainage is given as follows: On Sunday, July 25th, a heavy rain fell, drenching the soil with water to such an extent that on the following Wednesday the main drain was discharging, according to estimate, three or four gallons per minute, while the surface of the soil was dry enough to work on Tuesday morning, July 27th. Similar land, not underdrained, would not have been fit to plow in less than a week. One portion of this tract is devoted to an orchard of 1,300 standard and dwarf pear trees, planted in the spring of 1867. They are set at a distance of ten feet apart each way, in squares, every other tree in each alternate row being a standard, thus putting the standards twenty feet apart. One object of this arrangement is that if, in time, the dwarfs should fail, the standards may, by their growth, sufficiently occupy the ground. Two hundred and twenty-five of the trees are Bartletts, the remainder being apportioned to other approved varieties. The orchard receives careful attention, and is very healthy and promising. The vineyard was planted in the fall of 1867, and contains 2,400 vines, as follows: Delawares, 1,000; Ionas, 750; Ives Seedlings, 350; the remainder being principally Concords and Norton's Virginia. This vineyard, in addition to underdraining, was trenched with the spade, two feet deep, at a cost of nearly $200 per acre.

A SECOND CROP OF WATERMELONS.

Lee County, Alabama.—I have ripening a second crop of watermelons on the second system of vines, on old stumps. The old vines were cut away as soon as the first crop of melons matured. In quantity, the second crop is about one-third of the first; in quality, slightly inferior. I have fine ripe watermelons from 8th of July planting. Some ripened within seventy days from the date of planting. Dug holes one foot deep, used one-fourth of a bushel of barnyard manure and two ounces of soluble Pacific guano to each hill. The stumps producing the second crop were carefully hoed; deep cultivation would be destructive of the horizontal or lateral roots.

RYE STRAW.

Schenectady, N. Y.—The quantity of rye straw shipped from this county the past year amounts to four thousand eight hundred and forty-two tons, principally to paper-mills in Washington, Saratoga, Herkimer, and Albany Counties in this State, and some in bales to New York and Boston ports. The prices paid were $20 per ton for hand-threshed, and $16 per ton for machine-threshed. The straw was all raised on the uplands in this county, and what was lost as manure is made up by clover and other fertilizers—principally western gypsum.

SWEET POTATOES IN DELAWARE.

Milford, Del.—Some of our farmers have lost all their sweet potatoes, the plants being attacked by a gold-colored and black bug. What the dry weather did not kill the bugs did. One farmer in this immediate vicinity set out twenty thousand plants; was obliged to reset nearly all of them; they seemed to be doing well; had them cultivated, and upon going to them two or three days afterwards found that the bugs had destroyed almost the entire lot. He then plowed up the land, and has since sown it with turnips.

THE CASHMERE GOAT IN TENNESSEE.

Williamson County, Tenn.—The Cashmere goats of this county are rapidly increasing. The experiment of crossing the common goat with the Cashmere has been tested thoroughly in this county, and has proved a success.

IDAHO TERRITORY.

James H. Whitson, president of the Idaho Agricultural Society, writes as follows in reference to agriculture in Idaho:

The agricultural area of this Territory, though limited, is not near all taken up. There are valleys now susceptible of safe settlement (the Indians having vacated them by treaty, &c.) equal in fertility to any on this coast. Some few settlers have raised, the first season, as high as sixty bushels of wheat to the acre. In the immediate vicinity of these valleys, generally, are the best of grazing lands, too hilly for cultivation, with plenty of small clear streams. In a word, the greater portion of the Territory is one grand pasture, where stock can be fattened winter or summer, for when the summer grass gives out we only have to move our stock to the great white sedge plains, where they fatten all winter. We never feed cattle or sheep for beef or mutton, and our meat market will compare favorably with the eastern stall-fed cattle and sheep markets.

Dairying is being carried on quite extensively in the Territory, the number of milkers ranging from twenty to over one hundred cows; never feeding over six weeks during winter, (since the winter of 1864,) and then generally only straw. If we get good fall rains (the only failure of which was last fall) we have plenty of green grass till the first of January, and sometimes all winter. Cattle, sheep, and hogs are remarkably healthy generally; horses are subject to mountain fever when ridden or driven hard in the fall and winter, owing no doubt to the coldness of the nights and the carelessness of the owners.

At first we were dependent upon Oregon for our grain, flour, and bacon and whisky; now we raise and manufacture all these, and fur-

nish the military posts in our midst, and all our mining camps. In the spring of 1865 I paid as high as $18, coin, for fifty-pound sacks of flour, and $75 per hundred pounds of bacon; now flour is $3 per sack, and bacon twenty cents per pound.

We have three first-class flouring mills, water-power, and two steam distilleries in and near Boise City. There are also enough saw-mills in the country to furnish the necessary lumber for building, fencing, &c.; these are located in the mountains. Lumber at the mills, $25 per thousand; in Boise City, $40 per thousand.

Wheat, one year with another, will average twenty-five bushels per acre; oats, thirty-five to forty; barley, fifty to sixty. There are cases where sixty bushels of wheat have been raised to the acre, and one hundred bushels of barley per acre. This year from one square rod I produced fifty-four pounds of wheat, which is at the rate of one hundred and forty-four bushels to the acre. I gave it the name of "Idaho White wheat." I think it will be found to be a superior wheat; will mature here sown fall or spring; it is beardless, white, and produces a large amount of flour.

Vegetables and melons of all kinds grow to perfection. Our climate is congenial—health the general rule, sickness the exception.

The Territory is in great excitement at this time, in consequence of very rich placer diggings which have been discovered this season.

WASHINGTON TERRITORY.

A. H. Simmons, escretary of the Washington Territory Agricultural Society, sends the following statistics of the Walla-Walla Valley:

Average yield per acre.—Twenty-five bushels wheat, 30 bushels oats, 30 bushels barley, 40 bushels corn, 20 bushels rye, 40 bushels peas, 36 bushels beans, 300 bushels potatoes, 200 bushels sweet potatoes, 300 bushels turnips, 1,000 bushels carrots, 800 bushels parsnips, 20,000 pounds cabbage, 2½ tons hay. Forty thousand pounds apples, 30,000 pounds peaches, 40,000 pounds pears, 50,000 pounds plums, 20,000 pounds cherries, 40,000 pounds grapes, 15,000 pounds blackberries, 15,000 pounds raspberries, 5,000 pounds gooseberries, 10,000 pounds currants. Trees seven years old.

YIELD OF EACH TREE, VINE, PLANT, AND SHRUB.

	1st year.	2d year.	3d year.	4th year.
	lbs.	*lbs.*	*lbs.*	*lbs.*
Apples	20	50	125	250
Peaches	15	35	100	200
Pears	20	50	125	250
Plums	20	50	125	250
Cherries	5	15	50	100
The trees bear from graft in three years.				
FROM OFFSHOOTS.				
Blackberries	3	8	15	35
Raspberries	3	10	20	40
Strawberries	----------	1½	2	2
Grapes, (at 2 years)	3	10	25	75
Gooseberries, "	2	5	10	20
Currants, "	2	5	10	20
Pie plant, "	8	20	20	10

The various cereals and fruits of this valley are harvested as follows: Wheat from the 24th of June to 10th of July; oats, from 1st of July to 20th of July; barley, from 20th June to 1st of July; rye, from 1st of July to 10th of July; corn, from 20th of August to 10th of September: strawberries, from 1st of May to 10th of June; raspberries, from 10th of June to 20th of July; blackberries, from 25th of June to 1st of August; gooseberries, from 20th of June to 1st of July; cherries, from 20th of May to 1st of July.

LIVE STOCK AT CHICAGO.

A statement, furnished by George T. Williams, assistant secretary, of the receipts and shipments of live stock at the Union Stock-yards, Chicago, for each month of the quarter ending September 30, 1869, presents the following totals:

RECEIPTS.

Source of supply.	Cattle.	Hogs.	Sheep.	Horses
Illinois Central railroad	18,803	83,514	19,767	101
Chicago and Rock Island railroad	14,723	46,128	2,408	19
Michigan Central railroad	826	4,512	2,150	13
Pittsburg, Fort Wayne and Chicago railroad	175	1,001	1,260	78
Chicago and Great Eastern railway	326	1,209	1,528	2
Chicago and Alton railroad	25,578	55,839	6,120	28
Chicago, Burlington and Quincy railroad	36,179	111,440	14,132	57
Chicago and Northwestern railway	9,483	56,845	8,148	18
Michigan Southern railroad	687	6,588	4,746	79
Driven into yards	720	313	882	.....
Total	107,500	367,389	61,141	395

SHIPMENTS.

Illinois Central railroad	94	380	270	.....
Chicago and Rock Island railroad	1,547	249	306	2
Michigan Central railroad	22,940	50,505	1,257	8
Pittsburg, Fort Wayne and Chicago railroad	33,364	116,066	626	40
Chicago and Great Eastern railway	2,744	397	379	20
Chicago and Alton railroad	411	278	99	10
Chicago, Burlington and Quincy railroad	394	91	197	22
Chicago and Northwestern railway	1,628	1,007	1,179	200
Michigan Southern railroad	15,218	178,210	975	51
Total	78,340	347,183	5,288	353

NATIONAL EXHIBITION AT CORDOVA, (ARGENTINE REPUBLIC.)

A national exhibition of the products of art, industry, and science, will be inaugurated in the city of Cordova, in the Argentine Republic, on the 17th of April, 1870. As the termination of the Central Argentine railway, connecting Cordova with Rosario, a seaport town, will be celebrated at the same time and place, thousands will doubtless be attracted from the republic, as well as from Brazil, Paraguay, and Uru-

guay, which will be a good opportunity for American manufacturers and merchants to introduce their goods to these large and rich markets.

Manufacturers of agricultural implements and all other machinery are requested to send specimens of the same. They will be allowed to pass free of duty through the custom-house at Rosario, and should be marked [E. N. C.], consigned to the provincial committee at that city, which will be forwarded by the national government to Cordova; but if not sold in that city, exhibitors will take them back at their own expense. Foreign exhibitors will be allowed forty dollars in gold at Cordova, as sole compensation for each mechanic they send to explain the mechanism of their machinery. By the 1st of December (and in no case later than the 15th) persons desirous of contributing to the exhibition should address one of the following gentlemen, stating the space (in meters and square yards) required for their accommodation; and all contributions must be in Cordova by the 15th of March, 1870:

His Excellency Manuel R. Garcia, minister plenipotentiary and envoy extraordinary of the Argentine Republic. Address P. O. box 245, Washington, D. C. Office, No. 457 I street.

Edward F. Davison, esq., Argentine consul general. Office, 128 Pearl street, New York city.

Belisario Roldan, esq., special agent of the central committee; at the consul general's office.

C. H. Trumbull, esq., 56 South street, New York City.

Charles Heinsius, esq., Argentine consul, Savannah, Georgia.

Charles Morton Stewart, esq., Argentine consul, Baltimore, Maryland.

David D. Stackpole, esq., Argentine consul, Boston, Massachusetts.

Andreas Spring. esq., Argentine consul, Portland, Maine.

Nalbo Frasier, Argentine consul, Philadelphia, Pennsylvania.

Further particulars can be learned by addressing either of the above gentlemen, who will furnish circulars comprising all necessary information.

METEOROLOGY.

COMPILED IN THE DEPARTMENT OF AGRICULTURE FROM REPORTS MADE BY THE OBSERVERS OF THE SMITHSONIAN INSTITUTION.

Table showing the highest and lowest range of the thermometer, (with dates prefixed,) the mean temperature and amount of rain, (in inches and tenths,) for September, 1869, by the observers and at the stations named. Daily observations at 7 a. m. and 2 and 9 p. m.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
MAINE.				°		°	°	*In.*
Houlton	Aroostook	Chas. H. Fernald	5	84	28	36	62.7	2.10
Steuben	Washington	J. D. Parker	5	77	28	37	56.4	2.00
West Waterville	Kennebec	B. F. Wilbur	5	86	28	40	62.4	5.09
Gardiner	Kennebec	R. H. Gardiner	7	78	28	41	60.8	3.37
Norway	Oxford	H. D. Smith	6	86	28	34	60.4	4.40
Cornish	York	Silas West	5	81	28	40	60.4	3.38
Cornishville	York	G. W. Guptill	5, 6	82	28	40	63.0	4.17
Averages							60.9	3.50
NEW HAMPSHIRE.								
Stratford	Coos	Branch Brown	15	83	28	33	59.9	3.39
Whitefield	Coos	L. D. Kidder	5, 6	82	28	32	59.2	3.55
Goffstown Center	Hillsboro'	Alfred Colby	5	87	29	43	62.9	3.76
Averages							60.7	3.57
VERMONT.								
Lunenburg	Essex	H. A. Cutting	8	84	28	36	62.1	2.60
Randolph	Orange	Chas. S. Paine	7	85	28	35	61.7	2.35
Woodstock	Windsor	Doton & Miller	5	80	28	34	59.1	3.44
Hartford	Windsor	B. F. Eaton, M. D	20	82	27	38	66.3	2.90
Near St. Albans	Franklin	A. H. Gilmour	8	84	28	38	62.4	.....
West Charlotte	Chittenden	Miss M. E. Wing	8	87	27, 28	43	67.0	3.84
Middlebury	Addison	H. A. Sheldon	8	79	28	37	62.6	3.08
Panton	Addison	D. C. Barto	7	84	28	40	64.3	3.88
Averages							63.2	3.16
MASSACHUSETTS.								
Kingston	Plymouth	G. S. Newcomb	20	86	28	36	63.0	3.00
Topsfield	Essex	S. A. Merriam	20	85	28	37	63.3	3.54
Newbury	Essex	John H. Caldwell	5, 8	82	28	36	61.5	.....
Milton	Norfolk	Rev. A. K. Teele	20	91	28	40	60.5	3.78
Cambridge	Middlesex	Rev. J. B. Perry	20	86	28	42	63.1	.....
North Billerica	Middlesex	Rev. Elias Nason	20	86	28	36	63.9	.....
West Newton	Middlesex	John H. Bixby	20	91	29	38	64.8	8.83
New Bedford	Bristol	Samuel Rodman	20	85	28	41	61.3	2.53
Worcester	Worcester	Jos. Draper, M. D	20	83	28	39	62.5	4.74

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
MASS.—Continued.				°		°	°	*In.*
Mendon	Worcester	Jno. G. Metcalf, M. D.	20	84	28	35	62.3	6.60
Lunenburg	Worcester	Geo. A. Cunningham.	20	87	28	38	62.6	3.00
Amherst	Hampshire	Prof. E. S. Snell	20	85	28	36	62.1	4.32
Williams College	Berkshire	Prof. A. Hopkins	7,20	82	28	38	61.6	3.18
Hinsdale	Berkshire	Rev. E. Dewhurst	20	80	27,28	36	60.3	4.30
Averages							62.3	4.35
RHODE ISLAND.								
Newport	Newport	W. H. Crandall	20	82	28	46	63.6	3.19
CONNECTICUT.								
Columbia	Tolland	Wm. H. Yeomans	20	90	28	38	63.4	.....
Middletown	Middlesex	Prof. Jno. Johnston	20	88	28	37	63.4	3.66
Colebrook	Litchfield	Charlotte Rockwell	20	82	28	36	61.2	5.25
Brookfield	Fairfield	Rev. S. W. Roe	20	86	29	40	64.0	3.70
Averages							63.0	4.20
NEW YORK.								
Moriches	Suffolk	E. A. Smith & daugh's	20	96	28,29	45	67.3	5.69
South Hartford	Washington	G. M. Ingalsbe	7	88	28	39	67.2	3.10
Hudson	Columbia	G. P. Hachenberg, MD	7,20	87	29	42	66.2	3.68
Garrison's	Putnam	Thos. B. Arden	20	88	28	44	65.2	4.26
Throg's Neck	Westchester	Miss E. Morris	20	86	28	44	65.9	.....
White Plains	Westchester	O. R. Willis	20	82	28,29	44	63.2	.....
Deaf and Dumb Ins.	New York	Prof. O. W. Morris	20	86	27	48	67.6	4.07
Columbia College	New York	Prof. Chas. A. Joy	20	86	27,28	51	68.4	2.72
Flatbush	Kings	Rev. Eli T. Mack	20	85	28	45	65.5	3.46
Glasco	Ulster	D. B. Hendricks	16	88	27,28	43	65.2	3.07
Minaville	Montgomery	J. W. Bussing	20	85	28	40	63.9	4.70
Gouverneur	St. Lawrence	C. H. Russell	7	79	28	35	61.1	4.05
North Hammond	St. Lawrence	C. A. Wooster	14,15	88	28	38	64.6	5.30
Houseville	Lewis	Walter D. Yale	20	83	28	34	62.0	6.12
Leyden	Lewis	C. C. Merriam	20	79	28	34	59.5	6.29
South Trenton	Oneida	Storrs Barrows	6	86	27	40	62.1	5.28
Cazenovia	Madison	Prof. Wm. Soule	20	81	27	40	61.6	.....
Oneida	Madison	S. Spooner, M. D	13	88	28	42	62.0	5.14
Depauville	Jefferson	Henry Haas	5	82	27	34	58.5	6.95
Oswego	Oswego	Wm. S. Malcolm	7	81	27	44	63.1	3.65
Palermo	Oswego	E. B. Bartlett	20	85	28	40	61.7	3.80
North Volney	Oswego	J. M. Patrick	19,20	85	27	41	68.5	.....
Perry City	Schuyler	C. P. Murphy	20	91	28	41	65.0	.....
Waterburg	Tompkins	D. Trowbridge	19	89	28	36	61.0	.....
Nichols	Tioga	Robert Howell	5,20	36	27	38	62.5	.....
Newark Valley	Tioga	Rev. Sam'l Johnson	20	86	27,29	38	61.4	3.90
Himrods	Yates	Gilbert D. Baker	20	83	28	40	62.1	3.06
Rochester	Monroe	H. W. Mathews	19	80	27,28	44	63.4	5.11
Little Genesee	Allegany	Daniel Edwards	19	85	29	34	60.4	4.75
Suspension Bridge	Niagara	W. Martin Jones	20	88	28	39	63.2	.....
Buffalo	Erie	Wm. Ives	24	87	27	39	65.8	7.43
Averages							63.7	4.59

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
NEW JERSEY.				°		°	°	*In.*
Paterson	Passaic	Wm. Brooks	20	88	28, 29	42	64.8	2.98
Newark	Essex	W. A. Whitehead	20	86	28, 29	43	64.2	2.54
Trenton	Mercer	E. R. Cook	7, 20	85	28	46	68.5	1.98
Rio Grande	Cape May	Mrs. J. R. Palmer	20	90	28	40	67.6	3.75
Moorestown	Burlington	Thos. J. Beans	20	87	28, 29	47	65.6	3.23
New Germantown	Hunterdon	Arthur B. Noll	20	88	28	39	64.9	3.82
Readington	Hunterdon	John Fleming	13	92	29	38	64.7	.....
Haddonfield	Camden	John Boadle	20	85	27, 28	46	65.7	2.70
Newfield	Gloucester	E. D. Couch	7	90	28, 30	42	66.3	.....
Greenwich	Cumberland	Miss R. C. Sheppard	21	84	29	45	66.1	3.10
Vineland	Cumberland	John Ingram, M. D	6	86	28	42	67.3	6.63
Averages							66.0	3.41
PENNSYLVANIA.								
Nyces	Pike	John Grathwohl	6	85	28	30	61.0	4.30
Hamlinton	Wayne	Jas. D. Stocker	5	88	27, 28	40	62.5	5.85
Dyberry	Wayne	Theodore Day	5	84	28, 29	32	58.8	4.33
Fallsington	Bucks	Eben'r Hance	20	85	28	46	66.3	3.60
Philadelphia	Philadelphia	Prof. J. A. Kirkpatrick	20	86	28	49	68.6	3.27
Germantown	Philadelphia	Thos. Meehan	6	86	28	41	67.1	.....
Horsham	Montgomery	Miss Anna Spencer	10	88	28	44	65.4	4.80
Plymouth Meeting	Montgomery	M. H. Corson	20	84	29	41	65.3	3.82
Whitehall	Lehigh	Edward Kohler	7	83	29	38	64.4	.....
Factoryville	Wyoming	Rodman Sisson	20	83	28	33	61.3	3.65
Reading	Berks	J. Heyl Raser	7	85	29	43	66.0	4.83
Parkersville	Chester	F. Darlington, M. D	20, 21	87	29	43	67.2	5.19
Ephrata	Lancaster	W. H. Spera	8, 21	90	29	45	70.9	4.83
Mount Joy	Lancaster	J. R. Hoffer	21	87	29	42	66.8	.....
Carlisle	Cumberland	Wm. H. Cook, M. D	7, 20	90	29	40	66.1	1.90
Fountain Dale	Adams	S. C. Walker	21	85	28	43	63.8	2.84
Tioga	Tioga	E. T. Bentley	7, 15, 17, 19, 20, 22, 23, 24	84	28, 29	38	62.0	6.00
Lewisburg	Union	Prof. C. S. James	7, 20, 21	85	27	38	63.3	2.92
Grampian Hills	Clearfield	Elisha Fenton	20	85	29	33	59.3	3.96
Johnstown	Cambria	David Peelor	19	86	29	36	60.9	3.03
Franklin	Venango	Rev. M. A. Tolman	20	86	29	40	62.0	10.19
onnellsville	Fayette	John Taylor	25	87	28	36	63.0	.....
ew Castle	Lawrence	E. M. McConnell	19	81	28	35	62.0	.....
eaver	Beaver	Rev. R. T. Taylor	6, 19, 20, 24	80	27, 29	43	63.2	10.80
anonsburg	Washington	Rev. Wm. Smith, D. D	19, 24	88	28, 29	35	63.0	5.69
Averages							64.0	4.79
DELAWARE.								
Milford	Kent	Mrs. A. C. Whittier	5, 21	89	27	42	68.0	3.20
MARYLAND.								
oodlawn	Cecil	Jas. O. McCormick	21	88	29	44	66.4	3.04
Annapolis	Anne Arundel	Wm. R. Goodman	21	87	28	42	69.3	4.04
Mt. St. Mary's	Frederick	Prof. C. H. Jourdan	21	85	29	44	61.5	2.59
Averages							65.7	3.22

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
DIST. COLUMBIA.				°		°	°	*Ins.*
Washington	Washington	Smithsonian Institu'n	21	86	28, 29	49	68.2	2.40
VIRGINIA.								
Johnsontown	Northampton	C. R. Moore	21	90	29	50	69.6	2.20
Hampton	Elizabeth City	Jas. M. Sherman	21	92	29	46	70.5	1.10
Zuni Station	Isle of Wight	Robt. Binford	23	90	29	44	69.2	3.63
Bacon's Castle	Surry	B. W. Jones	8	92	29	48	71.6	.....
Comorn	King George	E. Tayloe	21	86	28	53	70.2	3.29
Vienna	Fairfax	H. C. Williams	8	86	29	42	68.8	3.71
Staunton	Augusta	J. C. Covell	22	82	28	44	64.1	3.84
Lexington	Rockbridge	W. H. Ruffner	22	90	29	41	67.4	4.73
Lynchburg	Bedford	Chas. I. Meriwether	21, 22	82	29	45	66.5	.....
Snowville	Pulaski	J. W. Stalmaker	22, 23	86	29	30	60.6	3.70
Near Wytheville	Wythe	Rev. Jas. A. Brown	22	82	29	36	61.5	4.20
Averages							67.3	3.38
WEST VIRGINIA.								
Romney	Hampshire	W. H. McDowell	29	94	29	40	68.3	.....
Cabell C. H	Cabell	C. L. Roffe	23	84	8	45	63.8	1.80
NORTH CAROLINA.								
Kenansville	Duplin	Rev. Jas. M. Sprunt	18, 22	89	3, 28	50	71.4	.....
Goldsboro'	Wayne	E. W. Adams, A. M.	22, 24	93	28	50	73.5	1.35
Mt. Olive	Wayne	E. D. Pearsall	23	88	28	53	69.5	5.10
Oxford	Granville	W. R. Hicks, M. D	21	86	28	.....	.....	.....
Albemarle	Stanley	F. J. Kron	22	92	29	36	66.5	2.50
Statesville	Iredell	Thos. A. Alison	22	86	28, 29	38	65.6	6.75
Asheville	Buncombe	E. J. Aston	2, 19, 21, 22, 23	76	28, 29	36	62.5	1.50
Asheville	Buncombe	J. T. E. Hardy, M. D	21, 22	76	28, 29	34	61.7	.....
Chapel Hill	Orange	David S. Patrick	19	89	27	55	74.7	.....
Averages							68.2	3.44
SOUTH CAROLINA.								
Aiken	Barnwell	Jno. H. Cornish	20, 22	88	28	54	71.0	3.00
Gowdeysville	Union	Charles Petty	22	90	29	51	73.3	1.77
Fort Hill	York	R. A. Springs, jr	22	90	30	50	71.2	.....
Averages							71.8	2.39
GEORGIA.								
Atlanta	Fulton	F. Deckner & Son	17, 20, 22	86	28	44	66.8	2.31
Berne	Camden	H. L. Hillyer	7, 8	84	28	58	72.1	4.50
Penfield	Greene	S. P. Sanford	17, 22	88	28	49	71.5	1.60
Averages							70.1	2.80
ALABAMA.								
Opelika	Lee	Miss Ella B. Shields	17	94	27, 28	57	76.1	0.44
Carlowville	Dallas	H. L. Alison	13, 23	88	28	52	73.2	1.95
Moulton	Lawrence	Thos. M. Peters, A.M.	1, 5, 19, 23,	80	28	45	66.8	6.60
Havana	Hale	S. K. Jennings, M. D	22	86	28	50	71.9	4.20
Fish River	Baldwin	W. J. Van Kirk	1, 4, 18	86	28	60	.....	.....
Mobile	Mobile	Lewes B. Taylor	18, 21, 22, 23	88	28	55	76.8	.....
Averages							73.0	3.30

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
FLORIDA.				°		°	°	*In.*
Port Orange	Volusia	Mrs. J. M. Hawks	7, 8	90	29, 30	72	79.0	.....
Jacksonville	Duval	A. S. Baldwin	26	91	27	68	78.5	7.00
Pilatka	Putnam	Gen. G. D. Robinson	14, 15, 16	92	27, 28, 29, 30	64	75.7	6.13
Ocala	Marion	Edward Barker	8, 9, 14	96	2, 4, 23, 30	70	80.3	.....
Manatie	Manatie	B. A. Coachman	8, 10, 11, 14, 15, 20, 25, 27	90	30	74	81.2	2.40
Chattahoochee	Gadsden	M. Martin	16, 20, 23	91	9	58	.....	4.50
Averages							78.9	5.01
TEXAS.								
Gilmer	Upshur	J. M. Glasco	2, 4	90	29	47	73.1	5.70
Blue Branch	Burleson	F. S. Wade	6	91	13	48	71.8	0.70
Lavacca	Calhoun	L. D. Heaton	1, 2, 3, 5	90	27	58	77.3	8.80
Austin	Travis	J. Van Nostrand	2	95	29	54	74.9	4.16
Averages							74.3	4.84
MISSISSIPPI.								
Brookhaven	Lawrence	T. B. Moore	27	90	29, 30	50	72.7	4.76
Near Brookhaven	Lawrence	T. J. R. Keenan	18, 22, 23, 25	86	29	50	73.3	5.00
Natchez	Adams	Wm. McCary	21	84	29	50	71.2	2.48
Marion C. H.	Lauderdale	Thomas W. Florer	6, 11, 18, 19	92	10	56	75.4	6.00
Averages							73.2	4.56
TENNESSEE.								
Elizabethton	Carter	Charles H. Lewis	22	88	28	34	66.5	2.25
Tusculum College	Greene	S. S. & Rv. W. S. Doak	18, 21	86	28	43	67.6	0.70
Lookout Mountain	Hamilton	Rv. C. F. P. Bancroft	19	87	27, 28	49	71.2	.....
Austin	Wilson	P. B. Calhoun	23	88	28	42	68.9	4.75
Clarksville	Montgomery	Prof. Wm. M. Stewart	18	86	28	42	66.1	2.55
Trenton	Gibson	W. T. Grigsby	21	90	28	41	69.2	1.30
Memphis	Shelby	Ed. Goldsmith	18	89	28	44	68.6	1.30
Averages							68.3	2.14
KENTUCKY.								
Pine Grove	Clarke	Sam'l D. Martin, M. D	22, 23	88	28	40	66.0	3.62
Danville	Boyle	O. Beatty	22	93	28	42	70.1	3.82
Louisville	Jefferson	Samuel Manly, M. D.	19, 20, 21	85	27	49	69.9	2.40
Near Louisville	Jefferson	Mrs. L. Young	23	91	27, 28	38	68.9	3.29
Averages							68.7	3.28
OHIO.								
Steubenville	Jefferson	Jos. B. Doyle	21	86	28	43	68.1	7.49
Painesville	Lake	E. J. Ferris	19	81	28	44	59.4	3.00
Gilmore	Tuscarawas	Samuel M. Moore	5	90	2	47	65.8	.....
Milnersville	Guernsey	Rev. D. Thompson	18	85	28	32	.....	8.10
Cleveland	Cayuhoga	Mr. & Mrs. G. A. Hyde	6	87	28	43	63.9	6.27
Wooster	Wayne	Martin Winger	19	92	28	36	56.1	5.40
Smithville	Wayne	Wm. Hoover	24	89	28	37	64.8	.....
Gallipolis	Gallia	A. P. Rodgers	5	88	28	38	66.0	4.45
Kelley's Island	Erie	Geo. G. Huntington	24	85	27	48	67.5	1.99
Sandusky	Erie	Thomas Neill	24	86	28	41	64.2	3.46

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
OHIO—Con'd.				°		°	°	*In.*
North Fairfield	Huron	O. Burras	19, 20	86	28	38	64.5	3.82
Westerville	Franklin	Prof. John Haywood.	21	86	28	39	62.6	3.57
North Bass Island	Ottawa	Geo. R. Morton, M. D.	4, 19	86	27	46	67.2	1.75
Marion	Marion	H. A. True, M. D	19, 24	84	28	36	62.5	3.93
Hillsboro'	Highland	J. McD. Mathews	19, 20, 21, 24	81	28	41	64.1	3.63
Bowling Green	Wood	John Clarke	19, 20, 24	90	28	32	65.2	3.68
Kenton	Hardin	C. H. Smith, M. D	19	94	28	45	67.9	3.10
Urbana University	Champaign	M. G. Williams	19	88	28	38	65.2	3.32
Bethel	Clermont	George W. Crane	19	91	27	44	65.5	3.75
Edgerton	Williams	A. B. Knight	18	87	28	31	62.9	2.02
Jacksonborough	Butler	I. B. Owsley, M. D	24	88	27	42	67.2	3.27
Mt. Auburn Inst	Hamilton	Miss Anna Y. White	5, 19	89	30	48	76.6	2.59
Cincinnati	do	R. C. Phillips	25	88	28	46	69.3	3.20
College Hill	do	John W. Hammitt	19	89	29	45	68.0	2.50
Averages							65.9	4.06
MICHIGAN.								
Monroe City	Monroe	Miss H. I. Whelpley	20	86	27	32	58.6	2.67
Alpena	Alpena	J. W. Paxton	19	70	27	42	60.1	1.54
State Agr. College	Ingham	Prof. R. C. Kedzie	19	89	27	38	63.5	1.43
Litchfield	Hillsdale	R. Bullard	19	86	28	39	62.2	2.03
Cold Water	Branch	N. L. Southworth	18, 20	85	27, 28	36	61.6	2.19
Grand Rapids	Kent	E. S. Holmes, D. D. S	19	90	27	37	64.6	
Northport	Leelenaw	Rev. Geo. N. Smith	19	82	27	37	61.2	7.00
Pleasanton	Manistee	J. D. Millard	19	84	27	34	59.4	4.15
Otsego	Allegan	Milton Chase, M. D	18	98	26, 27	37	64.4	
Copper Falls	Keweenaw	S. H. Whittlesey, M. D	19	78	27	33	56.3	1.42
Ontonagon	Ontonagon	Edwin Ellis, M. D	19	84	27	42	60.3	
Averages							61.1	2.80
INDIANA.								
Vevay	Switzerland	Charles G. Boerner	18, 23, 24	88	28	42	66.0	3.05
Mount Carmel	Franklin	J. A. Applegate & d'r.	19, 24	88	27	45	67.2	4.15
Muncie	Delaware	G.W.H. Kemper, M.D	24	88	28	37	64.8	1.95
Spiceland	Henry	Wm. Dawson	19	90	27	39	64.4	1.87
Laconia	Harrison	Adam Crozier	18, 20, 23	88	28	42	67.0	2.54
Columbia City	Whitley	Dr. F. & Miss L. McCoy	19	87	28	35	64.4	1.81
Knightstown	Rush	D. Deem	19	86	28	37	65.2	1.75
Indianapolis	Marion	J. V. Woolen, M. D	4	89	28	36	60.6	2.17
Near La Porte	La Porte	Fred. J. G. Andrew	19, 24	86	28	40	65.0	1.95
Rensselaer	Jasper	J. H. Loughridge	19	90	28	37	63.9	2.05
Merom	Sullivan	Thomas Holmes	20	86	27, 28	42	63.4	2.35
Kentland	Newton	Daniel Spitler	19	86	27	42	62.7	4.00
New Harmony	Posey	John Chappellsmith	18, 19, 20, 23	86	27, 28	45	67.5	2.43
Harveysburg	Fountain	B. C. Williams, M. D.	24	91	28	32	66.2	0.50
Averages							64.9	2.33
ILLINOIS.								
Chicago	Cook	J. G. Langguth, jr	19	90	28	42	67.3	0.89
Near Chicago	do	Samuel Brookes	19	88	28	40	63.7	
Evanston	do	Prof. Oliver Marcy	24	83	28	43	64.1	0.64
Marengo	McHenry	O. P. Rogers	19	86	26	34	60.3	0.93

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
ILLINOIS—Con'd.				°		°	°	*In.*
Mattoon	Coles	W. E. Henry	18, 19	86	26, 27	42	66.8	.....
Louisville	Clay	D. H. Chase, M. D.	20, 24	89	28	34	65, 5	4.30
Belvidere	Boone	G. B. Moss	19	86	28	34	61.4	2.59
Sandwich	De Kalb	N. E. Ballou, M. D.	18	88	28	34	61.2	1.33
Pana	Christian	Thomas Finley, M. D.	19, 23	86	28	42	65.6	2.15
Winnebago	Winnebago	J. W. & Miss Tolman	19	84	26	37	61.2	3.85
Rochelle	Ogle	Daniel Carey	19, 24	85	26	36	61.3	.....
Wyanet	Bureau	E. S. & Miss Phelps	19	86	26	36	63.7	0.67
Tiskilwa	Bureau	Verry Aldrich	19, 24	82	26, 28	34	62.0	.....
Peoria	Peoria	Fredk. Brendel	19	88	26	41	66.7	0.74
Springfield	Sangamon	G. M. Brinkerhoff	19	90	28	42	66.4	.....
Loami	Sangamon	Timothy Dudley	18, 24	88	28	40	66.8	1.90
Dubois	Washington	Wm. C. Spencer	24	91	28, 29	42	65.8	2.75
South Pass	Union	H. C. Freeman	18, 20, 23	88	27	43	68.5	.....
Galesburg	Knox	Prof. W. Livingston	19	86	26	39	61.5	1.06
Manchester	Scott	Dr. J. & C. W. Grant	23	90	26, 27	36	66.2	1.94
Mount Sterling	Brown	Rev. A. Duncan	19	86	26	40	64.4	1.30
Andalusia	Rock Island	E. H. Bowman, M. D.	19	82	26, 27	40	64.0	.....
Augusta	Hancock	S. B. Mead, M. D.	18, 19	83	26	40	64.6	1.82
Warsaw	Hancock	B. Whittaker	19	88	27	40	65.1	5.90
Averages							64.3	2.05
WISCONSIN.								
Manitowoc	Manitowoc	Jacob Lüps	5	78	27	37	59.0	1.84
Plymouth	Sheboygan	G. Moeller	19	85	26	32	60.0	3.60
Hingham	Sheboygan	John De Lyser	18	84	27, 28	33	61.1	.....
Milwaukee	Milwaukee	I. A. Lapham, LL. D.	18	83	27	38	60.3	1.97
Appleton	Outagamie	J. C. Foyé	19	78	27	37	60.8	.....
Geneva	Walworth	W. H. Whiting	18, 24	85	27, 28	36	61.5	0.93
Waupacca	Waupacca	H. C. Mead	19	84	26	36	61.6	.....
Embarrass	Waupacca	E. Everett Breed	19	84	26, 27	33	59.7	3.88
Madison	Dane	W. W. Daniels	19	81	26	40	61.8	2.68
Edgerton	Rock	H. J. Shintz	19	90	27	34	62.6	3.10
Baraboo	Sauk	M. C. Waite	3	82	27	31	61.6	2.25
New Lisbon	Juneau	J. L. Dungan	19	86	26	32	61.5	.....
Averages							61.0	2.53
MINNESOTA.								
Beaver Bay	Lake	C. Wieland	9	80	26	33	54.9	10.70
Afton	Washington	Dr. B. F. & Mrs. Babcock	18	84	25	32	60.7	7.35
St. Paul	Ramsey	Rev. A. B. Paterson	18	87	27	32	61.3	10.61
Minneapolis	Hennepin	Wm. Cheney	18	86	27	28	58.9	11.45
Sibley	Sibley	C. W. & C. E. Woodbury	18	86	27	29	59.9	6.60
Koniska	McLeod	Thomas M. Young	18	84	26	30	55.4	10.00
New Ulm	Brown	Charles Roos	18	87	25, 26	40	61.7	5.70
Madelia	Watonwan	W. W. Murphy	18	88	25, 26	40	63.6	6.60
White Earth	Becker	Dr. D. Pyle	18	78	25	28	55.1	18.51
Averages							59.1	9.72
IOWA.								
Clinton	Clinton	Dr. J. P. Farnsworth	19	83	26, 27	38	62.8	4.00
Waukon	Allamakee	E. M. Hancock	18	84	25, 27	36	50.1	.....
Dubuque	Dubuque	Asa Horr, M. D.	18	83	26	39	62.5	3.47

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
IOWA—Con'd.								
				°		°	°	*In.*
Monticello	Jones	M. M. Moulton	18	85	26, 27	40	62.6	2.75
Fort Madison	Lee	Daniel McCready	19	85	26	36	63.8	2.76
Guttenberg	Clayton	Jas. P. Dickerson	18	87	26	32	59.2	.....
Mount Vernon	Linn	Prof. A. Collins	18, 19	83	27	33	60.6	.....
Iowa City	Johnson	Prof. Theo. S. Parvin	10	88	27	33	63.2	3.09
Independence	Buchanan	George Warne, M. D.	18	87	27	37	60.5	.....
Near Independence	Buchanan	Mrs. D. B. Wheaton	18	89	25	39	63.3	.....
Waterloo	Black Hawk	T. Steed	18	88	27	30	63.1	4.95
Vinton	Benton	James Wood	19	84	27	34	62.0	3.03
Rockford	Floyd	H. Wadey	18	81	27	34	60.9	.....
Newton	Jasper	A. Failor	18	86	27	32	61.0	6.10
Ames	Story	John M. Cotton	23	82	27	36	62.9	5.60
Algona	Kossuth	I. H. Warren	18	86	27	33	60.5	.....
Near Algona	Kossuth	Ph. Dorweiler	18	84	27	31	59.3	.....
Mineral Ridge	Boone	Z. S. Sullivan	19	89	27	32	67.3	14.40
Boonesboro'	Boone	E. Babcock	18, 23	85	27	28	65.8	5.36
Fontanelle	Adair	A. F. Bryant	18	85	27	33	61.2	6.00
Grant City	Sac	Mr. & Mrs. Miller	18	89	27	31	62.4	6.80
Averages							61.6	5.26
MISSOURI.								
St. Louis	St. Louis	Rev. F. H. Stuntebeck	19	86	26	45	67.3	1.74
Allenton	St. Louis	A. Fendler, M. D.	18, 24	91	28	36	65.7	1.60
Hematite	Jefferson	John M. Smith	18, 24	88	28	33	66.2	2.40
Rolla	Phelps	Homer Ruggles	19	86	27, 28	39	64.9	2.31
Hermitage	Hickory	W. Moore, M. D.	12, 24	88	27	36	64.3	1.72
Bolivar	Polk	Jas. A. Race	5, 11, 17	84	27	44	68.8	1.20
Harrisonville	Cass	John Christian	18	84	27	42	65.3	3.55
Oregon	Holt	Wm. Kaucher	10, 11	89	27	37	65.0	3.28
Averages							65.9	2.23
KANSAS.								
Atchison	Atchison	Dr. H. B. & Miss Horn	4, 18	86	27	39	64.7	3.40
Leavenworth	Leavenworth	Dr. J. Stayman	3, 17, 18, 23	86	27	40	64.1	4.50
Olathe	Johnson	W. Beckwith	1	88	27	32	65.0	5.30
Paola	Miami	L. D. Walrad	17	88	27	34	66.0	4.00
Baxter Spring	Cherokee	Ingraham & Hyland	1	88	25, 27	52	72.2	3.70
Lawrence	Douglas	Prof. F. H. Snow	17	83	27	35	59.9	4.45
Holton	Jackson	James Watters, M. D.	3	89	25	44	65.5	.....
Le Roy	Coffey	J. G. Shoemaker	1	99	26	38	68.0	5.29
St. Agr. College	Riley	Prof. B. F. Mudge	2, 3, 17	83	27	41	61.9	1.83
Council Grove	Morris	A. Woodworth, M. D.	3, 17, 18	86	8	45	67.0	5.60
Averages							65.4	6.23
NEBRASKA.								
Omaha Mission	Omaha Reserve	Rev. Wm. Hamilton	17, 18, 23	85	25, 26	40	60.6	7.83
Elkhorn	Washington	John S. Bowen	18	84	27	38	61.5	.....
De Soto	do	Charles Seltz	10, 18	83	27	37	60.4	9.74
Fontanelle	do	Henry Gibson	23	85	25, 27	40	63.1	.....
Bellevue	Sarpy	Mrs. E. E. Caldwell	3, 18	84	27	37	63.5	4.60
Glendale	Cass	Dr. A. L. & Miss Child	18, 23	85	26	33	62.0	5.20
Averages							61.9	6.84

Table showing the range of the thermometer, &c., for September—Continued.

States and stations.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
UTAH TERRITORY.				°		°	°	*In.*
Coalville	Summit	Thomas Bullock	1, 17	84	30	42	61. 5	.....
CALIFORNIA.								
Monterey	Monterey	C. A. Canfield, M. D	27	94	19	44	62. 0	0. 02
Watsonville	Santa Cruz	A. J. Compton	26	99	20	43	65. 4	0. 20
Vacaville	Solano	Prof. J. C. Simmons.	26	96	22	58	72. 0	.....
Stony Point	Sonoma	A. W. Thornton, M. D	25	101	23	44	72. 1	0. 40
Averages							67. 9	0. 21
MONTANA TERR'Y.								
Deer Lodge City	Deer Lodge	Granville Stuart	8	85	25, 26	26	51. 4	0. 10

NOTES ON THE WEATHER—SEPTEMBER, 1869.

Lisbon, Me.—Severe gale 8th; auroras 11th, 27th.

Houlton, Me.—Tree foliage changing color 1st; gale 8th; auroras 11th, 13th; many wells dry 24th; frosts, light 28th, severe 29th.

Steuben, Me.—Many wells dry 7th; gale 8th; auroras 11th all night, 24th, 28th; frosts 28th, killing black 29th.

W. Waterville, Me.—Auroras 3d, 5th, 10th, 26th, 28th; gale 8th; first frost, slight, 29th. Month 3.5° warmer than its average for five years; rain-fall 2.92 inches greater than average.

Gardiner, Me.—Auroras 5th, 11th, 27th, very bright 29th, 30th; almost a hurricane 8th. A warm and, until the 26th, a very dry September. Average mean temperature of September for thirty-three years 58.51°.

Norway, Me.—Frost on low lands 1st; severe storm 8th; auroras 5th 27th, 28th, 29th; frost and ice 28th.

Cornish, Me.—Auroras 1st, 2d, 5th, 11th, 28th; frosts 1st, with ice 28th.

Cornishville, Me.—Average September temperature for forty years 56.167°; this year 62.98°.

Whitefield, N. H.—Auroras 5th, 11th; snow squall and freeze 28th.

Goffstown Center, N. H.—Auroras 27th, 28th; sharp frost 29th. Month calm and pleasant; springs, &c., low.

Lunenburg, Vt.—Pleasantest month this season; rather dry for streams; no frost, but a little snow on the mountains.

Randolph, Vt.—Storm 26th; aurora 27th; frost.

Woodstock, Vt.—Beautiful aurora 5th; frost 28th, 29th.

West Charlotte, Vt.—Auroras 1st, 2d, 4th, 10th, 14th, very brilliant 19th, 27th, 28th, 29th.

Panton, Vt.—Auroras 2d, 5th, 11th, 13th, 27th, brilliant 28th, 29th.

Castleton, Vt.—Aurora 6th; first frost 28th.

Hartford, Vt.—Weather warm and pleasant till first frost and ice, on 26th.

Kingston, Mass.—Slight frost 1st, 28th, 29th; great gale 8th; auroras 5th, 11th, 14th.

Milton, Mass.—Destructive gale 8th; auroras 5th, 27th, 28th; first frost 28th.

North Billerica, Mass.—Wild geese 25th; first hard frost 28th.

Mendon, Mass.—Auroras 5th, 11th; gale 8th; hail-storm 20th, stones twenty-eight to the pound; laid two inches deep.

Lunenburg, Mass.—Gale, rain, lightning, and thunder 8th; killing frost 28th. Average mean temperature of September for thirty years 61.6°; September, 1868, 58.96°; this September, 62.6°.

Amherst, Mass.—Auroras 27th, 28th, 29th; frosts 1st, 28th.

Newport, R. I.—Storm and gale 8th; forty-eight vessels ashore in bay and branches.

Brookfield, Ct.—Heavy rain 26th, ended the drought; sharp frosts 28th, 29th, killed vines, &c.

Moriches, N. Y.—Severe gale 8th; auroras 9th, 11th, 27th; heavy rain 26th, 27th; first frosts 28th, 29th.

Hudson, N. Y.—Auroral belts 3d, 27th.

Garrison's, N. Y.—Very dry till 25th; first frost 28th.

New York City.—Auroras 2d, 9th, 11th, 13th, 14th, 15th, 27th, 28th; magnetic clouds 3d, 10th.

North Hammond, N. Y.—Frost 1st; aurora 16th. September more like summer than any month this year.

Houseville, N. Y.—Auroras 1st, 2d, 5th, 13th, 27th, 28th, 29th, 30th; first white frost 28th.

Leyden, N. Y.—Electric light, flowing eastward in sun's path for thirty minutes, 7th; all kinds of vivid lightning, with thunder and rain, 20th; heaviest rain-storm known here 26th; first frost, ice, and snow-flakes 28th; till then month unusually warm and pleasant.

Cazenovia, N. Y.—Frosts 2d, 3d; aurora 27th.

Depauville, N. Y.—Auroras 1st, 2d, 3d, 4th, 5th, 9th, 10th, 13th; hot puffs of air from south 7th, followed by change to cool 8th, and rain 8th, 9th.

Palermo, N. Y.—Very light frost 1st. Warmest September for sixteen years, except 1855 and 1865; favorable for corn.

North Volney, N. Y.—Auroras 2d, 3d, 11th, 29th; wild geese 28th; no frost this month.

Waterbury, N. Y.—Light frost 2d; auroras 2d, 5th, 11th, 14th, 27th, 29th, 30th. Month warm and pleasant.

Himrods, N. Y.—Auroras 2d, 5th; the last, one column of light in east to meridian like train of a comet, emitted flashes for forty-five minutes, then broke into four pieces, floated north, and faded away.

Buffalo, N. Y.—Mean temperature 4.4° above September average of twelve years; only 3° below August.

Newark, N. J.—August drought continued into September; gale 8th; bright aurora 9th. The mean temperature exceeds twelve of twenty-six Septembers, whose average is 63.93°; warmest in 1846, 68.64°; coldest in 1859, 61.05°.

Moorestown, N. J.—The most severe drought in twelve years ended 27th; no soaking rain since June; no frost this month.

New Germantown, N. J.—Auroras 4th, 5th, 9th, 11th a segment, 13th and 27th beautiful; frost 29th.

Newfield, N. J.—Slight frosts 3d, 28th, 29th; very dry 5th; month favorable for gathering crops.

Greenwich, N. J.—Auroras 5th, 9th, 27th; light frost 29th; one hundred and forty-seven days since last frost.

Vineland, N. J.—Auroras 14th, brilliant 27th; light frost 28th.

Fallsington, Pa.—Aurora 27th; frosts 27th, 28th. A pleasant month.

Philadelphia, Pa.—Very high wind 6th; auroral light 27th; first frost 28th, light.

Horsham, Pa.—Auroras 11th, 12th; light frost in low grounds 29th.

Plymouth Meeting, Pa.—First frost 3d, light; one hundred and nineteen days between frosts; auroras 27th, 29th.

Dyberry, Pa.—Slight frosts 1st, 2d, 11th, 12th, 28th, 29th, 30th. Before the 26th water failed where it never did before.

Factoryville, Pa.—Light frost 1st, 2d, severe 28th; auroras 4th, brilliant 9th, 27th; ground dry and springs low.

Carlisle, Pa.—First frosts, very slight, 28th, 29th.

Fountain Dale, Pa.—Aurora 27th; harmless frost 29th. Dry weather injured corn, benefited grapes; pastures remained green.

Grampian Hills, Pa.—Month dry, sometimes warm; frosts harmless till 29th.

Johnstown, Pa.—Only one rain to wet the earth, but fog nearly every morning, and no frost.

Connellsville, Pa.—Frosts 1st, 28th, heavy 29th, with ice 30th.

New Castle, Pa.—Light frosts 1st, 2d, 26th, 28th.

Beaver, Pa.—Heaviest rain in two years 7th and 8th; fine aurora 27th; frost on hills 28th. A pleasant month, with much rain.

Milford, Del.—The drought ended 26th; aurora 27th.

Woodlawn, Md.—Severe drought till 26th; corn, potatoes, and pastures suffered.

Emmittsburg, Md.—Aurora 26th; severe frost 29th.

Johnsontown, Va.—Brilliant aurora 10th; very slight frosts 28th, 29th, 30th.

Zuni Station, Va.—Blackwater river dry 1st; tradition that it dried up one hundred years ago; aurora 27th; first frosts 28th, 29th.

Bacon's Castle, Va.—Wild, stormy day, little rain, 8th; bright aurora 14th; spots of frost 28th. Very warm, dry, and smoky till 26th; many fires, burning timber and fences.

Comorn, Va.—Heaviest rain this year 26th; frosts 28th, 29th; wild geese flying south 30th.

Lexington, Va.—Frosts 3d, 28th, 29th; wheat sowing 10th to 25th; aurora 27th. Grasshoppers riddled the cornfields like a hail-storm.

Snowville, Va.—Light frosts, 2d, 3d, 4th, heavy 28th, 29th, 30th; first ice 28th.

Wytheville, Va.—Frosts 2d, 3d, 10th, 28th, 29th, 30th; greatest rain in several years 25th and 26th.

Romney, W. Va.—First frost 2d; heavy rains 6th, 26th; frosts and fogs 29th, 30th.

Mt. Olive, N. C.—Drought—mills stopped, people without meal.

Albemarle, N. C.—Light frosts 28th, 28th. Another dry month, rain of 26th not sufficient.

Statesville, N. C.—Aurora 24th; first frosts 28th, 29th.

Fort Mill, S. C.—Frosts 28th, 29th.

Gowdysville, S. C.—Cotton opening 1st; harmless frosts 28th, 29th.

Atlanta, Ga.—No rain from August 27th to 20th instant. Ground in good condition for fall sowing.

Moulton, Ala.—Light frosts 27th, 28th; corn fit for grinding by 16th; weather damp and cool; no storms.

Jacksonville, Fla.—Month of storms and high winds; mean temperature about average; rain-fall half an inch above average.

Pilatka, Fla.—Except first three days wind steadily from northeast; equinoctial without high wind, or lightning and thunder.

Blue Branch, Texas.—Swans going south 10th, and brant 25th; month dry, favorable for harvesting corn.

Grenada, Miss.—Slight frosts 27th, 28th; only four frosts in September in fourteen years. Except a few days, month unusually warm.

Brookhaven, Miss.—Very cool 2d, 8th, 9th; rest of month dry and pleasant.

Elizabethton, Tenn.—Harmless frost 28th; month unusually dry.

Tusculum College, Tenn.—First frosts 28th considerable, 29th light.

Trenton, Tenn.—Very light frosts 27th, 28th; month very dry; but one rain, or appearance of rain.

Pine Grove, Ky.—Frost reported 9th; grasshoppers damaging rye and turnips, and delaying wheat-sowing 16th to 27th; light frosts 27th, 28th, 29th.

Cleveland, Ohio.—Auroras 3d, 27th; thunder and hail 17th; no frosts; not many, but heavy rains; more rain than in any one of fifteen Septembers, except in 1866.

North Fairfield, Ohio.—Frosts 1st, (light,) 28th, (heavy;) brilliant aurora 27th.

Bowling Green, Ohio.—Aurora 27th; frost and ice 28th; the month warm.

Kelley's Island, Ohio.—Auroras 4th, 5th, 9th, brilliant 13th; temperature of lake water 65° on 30th.

Sandusky, Ohio.—Swallows leave 5th; aurora 9th; first white frost 28th.

Westerville, Ohio.—Slight frosts 1st, 29th, heavy 2d and 28th; bright aurora 27th.

Hillsboro', Ohio.—First frosts 27th, 28th, 29th, 30th; aurora 28th.

Kenton, Ohio.—First frosts 2d, killing 28th; auroras 2d, 27th.

Urbana, Ohio.—Frosts—light 1st, heavy 28th, 29th; auroras 13th, 27th; mean temperature of month 5° above August, and 1.67° above September average for seventeen years.

Jacksonburg, Ohio.—Not a cloud 1st to 6th; auroras 4th, 27th; first frost since April, 15th, 27th.

Alpena, Mich.—Bright aurora 27th; first frost 29th. Much clear sunny weather in September.

Litchfield, Mich.—Light frosts 1st, 17th—heavy, ice, frozen ground, 28th, yet corn not much injured.

Coldwater, Mich.—Frost on low grounds 1st, 28th; aurora 27th.

Northport, Mich.—Auroras 13th, 30th. No frost yet.

Copper Falls, Mich.—Auroras 9th, 27th; frosts 28th, 29th.

Vevay, Ind.—First frosts 27th, 28th; river fogs prevented damage from frosts.

Mount Carmel, Ind.—First frosts 27th, 28th—little damage; aurora 27th.

Spiceland, Ind.—First frosts 27th, 28th, 29th. Fine weather.

Knightstown, Ind.—Hard frost 27th, harder 28th. More dark sky in September than in the whole season.

La Porte, Ind.—Auroras 9th, very bright 27th; frost 28th.

Rensselaer, Ind.—Auroras 2d, 3d, 9th, 27th; first frost, very heavy, 28th.

Chicago, Ill.—Very bright aurora; tinged streamers changed form rapidly.

Near Chicago, Ill.—First frost 28th; rime only on east sides of shrubbery, &c.

Marengo, Ill.—Two-arched aurora with streamers 9th; first frost since 5th of June, 26th, light; but another, on the 28th, killed tomato vines, &c.

Louisville, Ill.—Frosts—light 27th, hard 28th; aurora 27th; grasshoppers very numerous 30th.

Belvidere, Ill.—Auroras 8th, 10th, 27th; first frosts 26th, with ice 28th; one hundred and forty-three days between frosts.

Winnebago, Ill.—Frosts—light 8th, severe 26th; auroras—brilliant 9th, faint 27th.

Springfield, Ill.—Little, if any, frost; some cool days, but a very pleasant month.

Manchester, Ill.—Aurora all night 9th, very bright.

Mount Sterling, Ill.—First frost 25th; ice in some places.

Plymouth, Wis.—Auroras 9th, 27th, 29th; first frosts 26th, 28th, doing little damage.

Milwaukee, Wis.—Auroras—9th brilliant, 27th all evening; frost 27th.

Geneva, Wis.—First frosts 27th, 28th; injured corn.

Embarrass, Wis.—Frosts—1st light, severe 26th, 27th, 28th; auroras 2d, 5th, 9th, 10th, 12th, 26th, all night 28th, 29th.

Baraboo, Wis.—Frost 26th, with ice 27th; fog saved some low-land corn; upland corn not damaged.

Beaver Bay, Minn.—First frosts, near the lake, 25th, 27th; aurora 27th.

Afton, Minn.—Auroras 9th, 28th, 29th; frosts—light 26th, heavy 27th. The unusual rainfall injured wheat, and raised Lake St. Croix beyond all precedent.

St. Paul, Minn.—First frost 27th, hard. The wettest September known here; sixteen rainy days—double the amount of any September in ten years—causing loss of immense amounts of produce, lumber, &c., and raising the Mississippi higher than ever known at this season.

Minneapolis, Minn.—Frost and ice 27th. Swamps flooded, and much hay lost.

Koniska, Minn.—Brilliant aurora 10th; frosts—slight 11th, severe 26th; heaviest September rain known here 11th and 12th.

New Ulm, Minn.—Ice 27th; auroras 28th, 29th.

Madelia, Minn.—Damaging hail-storm 12th; frosts—light 25th, killing 27th.

White Earth, Minn.—Thunder and hail-storm, with great darkness, 23d; rain continued 24th—fall over ten inches; first frost 25th; snow reported 24th; bright white aurora 29th, with severe gale all night.

Clinton, Iowa.—Slight frosts 7th, 8th, 26th, 28th; auroras 9th, 29th. River higher than in ten years in September.

Waukon, Iowa.—Auroras 5th, 9th, 27th, brilliant 28th, 29th; frosts—slight 21st, injured backward corn 26th.

Dubuque, Iowa.—Auroras 9th, 27th; frost 25th.

Monticello, Iowa.—First frost 27th. Between frosts, in 1865, one hundred and thirty-nine days; 1866, ninety-four days; 1867, one hundred and ten days; 1868, one hundred and eighteen days; 1869, one hundred and eleven days.

Guttenburg, Iowa.—Frosts 8th, 26th, 27th; aurora 9th. No ice yet.

Iowa City, Iowa.—First frost 26th. Mean frost date for thirty-one years, September 24th; September average mean temperature for thirty-one years, 63.37°; average rain for twenty-two years, 4.24 inches.

Independence, Iowa.—Auroras 2d, 9th, 27th; frosts 26th, 27th. Month ends muddy.

Near Independence, Iowa.—First frosts 7th, 8th, 25th, with ice 27th.

Newton, Iowa.—Hail-storm 26th; killing frost 27th; aurora 27th.

Algona, Iowa.—First frost 27th. Wettest and windiest September ever known here.

Fontanelle, Iowa.—Wild geese going south 24th, cranes 25th.

Boonesboro', Iowa.—Month 4° above September average of fourteen years.

Allenton, Mo.—First frosts 26th, 27th, 29th.

Harrisonville, Mo.—Light frost on low lands 8th, 9th, white 26th.

Oregon, Mo.—Auroras 4th, 9th, 27th; ducks from north 15th, geese 22d; first frosts 26th, 27th.

Atchison, Kan.—First frosts, light, 8th, 27th; bright aurora 28th.

Paola, Kan.—Ducks, geese, and cranes moving south 30th.

Holton, Kan.—Remarkably cool and wet summer, and yet crops of all kinds good and abundant.

Manhattan, Kan.—First frost, light, 26th; very bright aurora 27th.

Elkhorn, Neb.—Slight frost 16th, heavy 27th. Coldest September but two in twelve years.

Glendale, Neb.—Aurora 9th; first frosts 16th, 21st, 25th, 27th severe.

Coalville, Utah.—Hail covering ground 3d; killing frost 13th; mountains white with snow 18th; melting snow three inches 30th.

Harrisburg, Utah.—A very dry month—no rain; no frost here, but higher settlements have suffered by some lately. This has been the driest and hottest season ever known here.

Watsonville, Cal.—Earthquake 5th, at 7.30 a. m., for two or three seconds. Month unusually warm.

Stony Point, Cal.—Buckwheat harvested 1st; very warm from 22d to 28th.

Deer Lodge City, Mon. Ter.—Auroras 3d, 29th; snows on mountains 5th, 9th, 24th. Driest September ever known in mountains; small swamps, never before burned, burnt out.